iPECS

LIP-8002E/8002AE

User Guide

Please read this manual carefully before operating Phone. Retain it for future reference

iPECS is an Ericsson-LG Brand

ERICSSON LG

Revision History

Issue	Date	Remark
1.0	Mar. 2012	Initial Release
1.1	Oct. 2012	Changed CI to Ericsson-LG

Disposal of your old appliance

1. When the crossed-out wheeled bin symbol is attached to a product, it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by government or the local authorities.
The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

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Important Safety Information

To prevent unexpected danger or damage please read this information before installing or attempting to repair you phone. Warning and Caution information is provided to alert the consumer of known dangers:

Warning: To reduce the possibility of electric shock, do not expose your phone to high humidity areas, such as a bathroom, swimming area, etc.

Caution: Use only Ericsson-LG approved batteries and desktop chargers to avoid the damage to the phone. Using other batteries or chargers voids your warranty and may cause an explosion.

Warning

1. Only trained and qualified service personnel shall install, replace or service the phone.
2. Do not spill liquid life water on the phone. If so, call the service center as this may result in fire or electric shock.
3. If you see smoke or smell something during use, unplug the power cord and the phone line. Call the service center immediately.
4. If the power adapter is used, do not touch the plug with wet hands. This may result in a fire or an electric shock or equipment damage.
5. Do not use the phone during a thunderstorm. Lightning strike may result in fire, severe electrical or acoustic shock.
6. Do not use the power adapter if the power cord or wall outlet is damaged. This may result in fire or an electric shock.

Caution

1. Ensure that children do not pull on phone cords. This may injure children or result in equipment damage.
2. The ear-piece houses a magnetic device which may attract pins or small metal objects. Keep headset clear of such objects and check before use.
3. Avoid placing the phone in an area that is excessively dusty, damp or subject to vibration.
4. Choose a site for the phone that is well-ventilated and dry.
5. Do not plug multiple plug-packs into one power outlet. This may result in the plug overheating and may result in a fire or plug pack failure.
6. Do not put heavy things on the phone.
7. Do not drop or throw the phone.
8. Static electricity discharge will damage electronic components.
9. Keep out of direct sunlight and away from heat.
10. No user-serviceable parts inside. Do not insert a screwdriver or any metal objects into the phone. This may cause electric shock or damage the equipment and will render the warranty void.
11. Clean the phone with a soft, dry cloth only. Do not use volatile liquids such as petrol, alcohol, or acetone as this may cause a fire or result in discoloration or damage to plastics. Do not clean with wax or silicon products as these may enter the equipment and cause operation to become unstable.

[EU]

European Union Declarations of Conformity

Ericsson-LG Co., Ltd. declare that the equipment specified in this document bearing the " CE" mark conforms to the European Union Radio and Telecommunications Terminal Equipment Directive(R&TTE 1999/5/EC), including the Electromagnetic Compatibility Directive(2004/108/EC) and Low Voltage Directive(2006/95/EC).
Copies of these Declarations of Conformity (DoCs) can be obtained by contacting your local sales representative.

[USA/CSA]

FCC/IC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 /RSS-GEN of the FCC/IC rules. Operation is subject to the following two conditions:
(1)This device may not cause harmful interference; and (2) This device must accept any interference received, including interference that may cause undesired operation.
This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.
The use of this device in a system operating either partially or completely outdoors may require the user to obtain a license for the system according to the Canadian regulations.

CAUTION : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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1. Introduction

1.1 General

Your telephone is connected to an advanced-technology, highly-versatile, fully-featured telecom system designed to make office communications easy and productive. Employing state-of-the-art Voice over Internet Protocol (VoIP) technology, voice and data converge on a single IP packet network. Because each iPECS Phone is an IP appliance, it can be moved easily throughout the office LAN and maintain normal operation.

1.2 Feature Information

We have taken every effort to make this user guide simple and straightforward. The guide starts with the simpler operations of the iPECS Phone, and moves on to receiving and placing calls, and then to more advanced features. Each section includes a brief and basic description of each feature and step-by-step operation instructions.

The operations shown in this guide use the System's base default Numbering Plan. Your specific Numbering Plan may be different. Some features may not be available for you to access or may be subject to certain limitations based on the set-up of the System (refer to your System.

Under certain operation conditions, this equipment cannot be relied upon to make emergency calls (loss of power, etc.). Alternative arrangements should be made for access to emergency services.

1.3 Feature Groupings

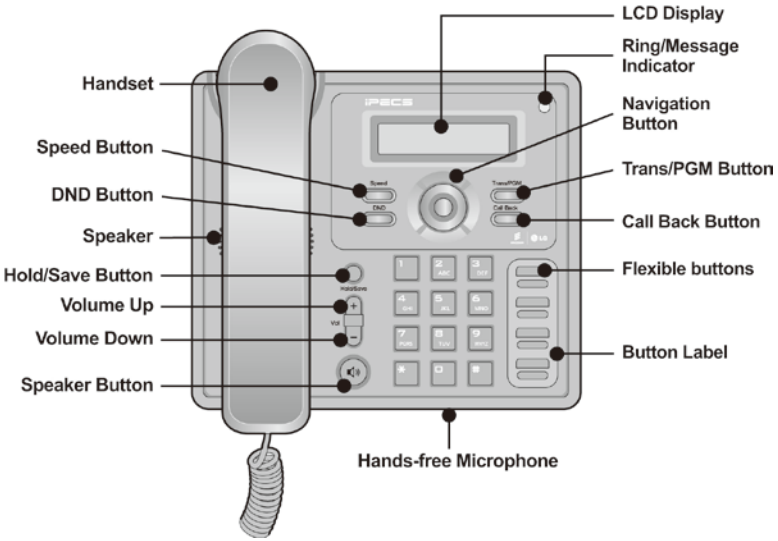
Every effort has been taken to divide the features into a logical and consistent sequence so that features can be quickly located.

Features have been divided into groups, *Receiving calls*, *Placing calls* etc. Within each group, features are arranged according to the difficulty of operation and frequency of use.

1.4 iPECS LIP-8002E/2AE Phone Description

The iPECS LIP-8002E/2AE Phone incorporates the latest in VoIP technology and is intended for basic communications (ex., a lobby or limited use phone). The following image shows the LIP-8002E/2AE.

Features are generally accessed using programmed *fixed*, or *flexible buttons*, dial pad buttons, or dial codes entered from the dial pad. In the remainder of this User Guide, the Fixed or Flexible buttons are shown with a box surrounding the BUTTON designation. The following image shows the phone with button descriptions.



iPECS LIP-8002E/2AE Diagram

DND – Blocks all incoming calls.
Speed – Access speed dialing, speed programming.
Vol ▲ ▼ – Adjusts volume for ringing, headset, and speakerphone; adjusts LCD brightness.
Trans/PGM – Call transfer, or programming mode.
Hold – Places active call on hold or saves programming information.
Call Back – Initiates call back request when calling a busy station; call is completed when busy station returns to idle status.
Speaker – Allows User to place a call while on-hook. Toggle to activate.
Flexible – Some are system pre-programmed for line appearance, and some are user programmable.
Ring/MSG Indicator – Illuminates when ringing, or message waiting.
LCD Display – Phone interface for status, dialing directories, and text message information.
Hands-free Microphone – Used for hands-free speakerphone function.

1.5 LIP-8002E/2AE Phone Installation

The LIP-8002E/2AE can be connected to any standard 10/100 Base-T Ethernet switch port. When the LIP-8002AE is connected to an 802.3af compliant switch port (ex., POE8), The LIP-8002E/2AE obtains power from the Ethernet port. When LAN power is available, do not use AC/DC adaptor. When LAN power is not available, the AC/DC adaptor must be used. The following image shows how to connect the handset, power cord, and LAN cable to the phone.(The LIP-8002AE isn't support PoE and can use only the supplied adaptor)

1.5.1 Wiring Connectors

The LIP-8002E/2AE has a two Ethernet ports one is connected to the LAN using a RJ-45 plug terminated category 5 cable supplied with the Phone, the other can be connected to a desktop PC. Using the cable, one RJ-45 plug is inserted into the "LAN" jack. The other RJ-45 plug is inserted into the RJ-45 jack previously wired to an Ethernet switch port accessible by the iPECS system. To power the LIP Phone over the LAN, the switch port must support POE (Power over Ethernet) standard 802.3af.

1.5.2 Power

The LIP-8002E/2AE can be powered by the AC/DC Adapter-K- (5 V @0.7A) or over the LAN cable using the POE8 or other 802.3af compliant switch. (The LIP-8002AE isn't support PoE and can use only the supplied adaptor)

If using the AC/DC Adapter, after connecting the Phone to the LAN, the Adapter's DC voltage plug is inserted into the power-input jack in the underside of the Phone. One end of the AC power cord is inserted into the mating receptacle of the AC Adapter, and the other end is inserted into the AC power outlet.

1.5.3 Wall Mount

The LIP-8002E/2AE can be wall mounted as needed. The following instructions detail how to perform a wall mount installation:

- Mark and drill two (2) 7mm holes for plastic wall anchors.
- Insert the two (2) anchors into the holes and insert and tighten each screw leaving about 2.5 mm (1/8-inch) of the screw exposed.
- Slide the LIP-8002E/2AE over the screws and assure the phone is secure.
- NOTE—It may be necessary to remove the phone and tighten or loosen the screws for a secure mounting.
- For the wall-mounting, sleeve of the CAT5 cable should be moved backward to prevent it protrude.

2. Receiving Calls

2.1 Answering a Call While Idle

There are 3 basic types of incoming calls; internal/external calls, **Intercom Voice Announce** calls, and *Hold* recalls.

Your phone may be assigned **Ringing Line Preference**; in this case, calls that ring are answered by lifting the handset. Otherwise, you must press the flashing Flex button.

External calls are from CO lines or VoIP channels that are programmed to ring at your phone. For external calls, **Delay Ring** may be assigned allowing others to answer the call before the call rings at your phone.

Calls can be forwarded in some manner from another user; if providing call coverage for other users, you may also receive **Station Call Coverage** calls.

Calls placed on **Hold**, including Transfers, parked calls, etc., will **Recall** if left on hold for too long.

ICM Voice Announce calls are answered based on the **ICM Signaling mode** at the receiving phone; in Hands-Free (HF) mode, after the splash tone and announcement, speak normally into the microphone. In the Privacy (PV) mode, lift the handset to respond. The **ICM Signaling mode** can be assigned in *Station Programming*.

In iPECS-LIK, iPECS SBG-1000, iPECS-MG

To answer a call ringing at your phone:

- Lift the handset, the call will be connected.

To respond to an Intercom Voice Announce call:

- Lift the handset to respond.

2.2 Responding to a Call While Busy

While you are busy on another call, you may receive a Muted Ring, Camp-On tones, or Voice-Over announcements. Muted Ring is provided over the speaker of your Phone indicating a **Call Waiting**. You also may receive **Camp On** tones, a burst of tone on top

of the existing call, as an indication of another call waiting.
While busy, certain stations can activate **Voice-Over** to your phone. When used audio is received from both the active call and the **Voice-Over** announcement.
Respond to any of these Off-hook Signals by: placing the existing call on Hold and responding to the new incoming call, activating ***One-time DND.***

To answer a Call Waiting:

- Press HOLD, and/or
- Press the FLEX button.

To active One-time DND:

- Press the DND button.

2.3 Differential Ring Signals

When multiple phones in a small area ring, it can be difficult to tell which are ringing. The iPECS Phone has 14 **Ring Tones** available for differentiating one phone's ringing from another. Four of the tones are stored in the phone permanent memory; the remaining ten tones are in the system memory. Four of these ten can be downloaded into the phone memory for use as the 5th to 8th **Ring Tone**

In iPECS-LIK

To download a Ring Tone from System memory:

- Press TRANS/PGM,
- Dial 1 for Ring Tones,
- Dial 5 for Ring Tone download,
- Dial the phone's memory location to receive the tone (5-8),
- Dial 0-9 for the desired tone number; a sample tone is played downloading the selected one.
- Press HOLD to download and a confirmation tone is heard.

To select a Ring Tone from phone memory:

- Press the TRANS/PGM button,
- Dial 1 for Ring Tones,
- Dial 1 or 2 for Internal or External ring,
- Dial 1-8 for the desired tone number; a sample tone is heard,
- Press HOLD to make the selection

In iPECS-MG

To download a Ring Tone from System memory:

- Press TRANS/PGM,
- Dial 2 for Ring Tones,
- Dial 3 for Ring Tone download,
- Dial the phone's memory location to receive the tone (5-8),
- Dial 0-9 for the desired tone number; a sample tone is played downloading the selected one.
- Press HOLD to download and a confirmation tone is heard.

To select a Ring Tone from phone memory:

- Press the TRANS/PGM button,
- Dial 2 for Ring Tones,
- Dial 1 or 2 for Internal or External ring,
- Dial 1-8 for the desired tone number; a sample tone is heard,
- Press HOLD to make the selection

2.4 Answering Calls to Other Stations

When nearby stations are ringing, you may pick-up (answer) the call. Select to answer a call ringing at a specific station (**Directed Call Pick-Up**) or you may choose to answer the oldest call ringing to your station group (**Group Call Pick-Up**). Assign a Flex button with the Group Call Pick-Up code for one-touch access.

NOTE—Pick-Up will not answer calls on the ringing station Private Line unless the line appears on your phone.

To answer a call ringing at another station:

- Lift the handset,
- Dial Directed Call Pick-Up code**,**
- Dial the Intercom Number of the ringing station; call is connected.

To answer a call ringing at a station in your group:

- Lift the handset,
- Dial Group Call Pick-Up code, the call is connected.

2.5 Using Do-Not-Disturb (DND) to Block Incoming Calls

Activate Do-Not-Disturb (DND) when you wish not to be interrupted by pressing the DND button; the phone will block incoming calls. Internal callers will receive a fast busy tone and the display will show the DND status. Activate Do-Not-Disturb while busy (One-Time DND); DND will be active only for the duration of the present call, and requires a DND button.

When an Executive activates DND, calls are forwarded to the paired Secretary automatically.

The Attendants and Secretary may be able to activate **DND Override** and **Intrude** on an active call. The Attendants may also cancel DND at other stations.

2.6 Forwarding Calls

2.6.1 Forwarding calls to another station or Voice Mail

Incoming calls may be diverted to other resources of the system. Resources include other stations, Internal **Voice Mail** and **External Voice Mail**. Your LCD and the LCD of the forward receiver will both indicate the forward status.

Call Forward can be activated from your phone or from a different station (**Call Forward, Remote**). You may define the conditions or 'type of forward' as below:

1: Unconditional—All calls to the station, except recalls, are forwarded.

2: Busy—Immediately forwards all calls, except recalls, when the station is busy.

3: No Answer—Forwards all calls to the station, except recalls, when the station does not answer within the No Answer timer.

4: Busy/No Answer—Forwards calls if the station is busy or does not answer within the No Answer timer.

When you forward calls from a different station, you may need to enter your ***Authorization Code*** (station number and password).

In iPECS-LIK, iPECS SBG-1000, iPECS-MG

To activate Call Forward from your phone to another phone or internal system resource:

- Press SPEAKER on and DND button,
- Dial the type of forward code 1-4,
  1= Unconditional, 2=Busy, 3=No Answer, 4=Busy/No Answer
- Dial the destination number.
- Press HOLD button or OK button to save.

To deactivate Call Forward from your phone:

- Press SPEAKER on,
- Press DND button
- Press the '#' key.

To activate Call Forward for your phone from a different phone (Call Forward, Remote):

- Press SPEAKER on and DND button,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization Code (Station number & Password),
- Dial the type of forward code 1-4,
- Dial the destination number,
- Press HOLD button or OK button to save.

To deactivate Call Forward, Remote:

- Press SPEAKER on,
- Press DND button,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization Code (Station number & Password),
- Press the '#' key.

2.6.2 Forwarding calls to an external number

Forward calls to an external CO/IP destination; calls can be forwarded from an internal station or a remote location. You may define the conditions or 'type of forward' as below:

1: Unconditional—All calls to the station, except recalls, are forwarded internally or externally.

2: Busy—Immediately forwards all calls to the station, except recalls, when station is busy.

3: No Answer—Forwards all calls to the station, except recalls, when the station does not answer within the No Answer timer.

4: Busy/No Answer—Forwards calls if the station is busy or does not answer within the No Answer timer.

When you forward calls from a different station or a remote location, you may need to enter your *Authorization Code* (station number and password). In addition, from a remote location, you must access the system through a *DISA* enabled CO line.

In iPECS-LIK, iPECS SBG-1000

To activate Call Forward, Off Premise (forward to an external number) from your phone:

- Press SPEAKER on and DND button,
- Dial the type of forward code 1-4,
  1= Unconditional, 2=Busy, 3=No Answer, 4=Busy/No Answer,
- Press SPEED,
- Dial Speed Dial bin number.

To activate Call Forward, Off Premise (forward to an external number) from a different phone:

- Press SPEAKER on and DND button,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization Code (Station number & Password),
- Dial the type of forward code 1-4,
  1= Unconditional, 2=Busy, 3=No Answer, 4=Busy/No Answer,
- Press SPEED,
- Dial Speed Dial bin number.

To activate Call Forward, Off Premise (forward to an external number) from a remote location:

- Dial the telephone number of a DISA assigned CO line,
- While receiving dial-tone, dial the Call Forward feature code,
- Dial your Authorization code (Station number & Password),
- Dial the type of forward code 6-9,
- Dial Speed Dial bin number.

In iPECS-MG

To activate Call Forward, Off Premise (forward to an external number) from your phone:

- Press SPEAKER on and DND button,
- Dial the type of forward code 1-4,
  1= Unconditional, 2=Busy, 3=No Answer, 4=Busy/No Answer,
- Dial Telephone number,
- Replace the handset, return to idle.

To activate Call Forward, Off Premise (forward to an external number) from a different phone:

- Press SPEAKER on and DND button,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization Code (Station number & Password),
- Dial the type of forward code 1-4,
  1= Unconditional, 2=Busy, 3=No Answer, 4=Busy/No Answer,
- Dial Telephone number,
- Replace the handset, return to idle.

2.6.3 Forwarding callers to a Text Message

Using an iPECS Phone, the system can be setup to return a 'Text Message' to callers. When calling your Station, Internal callers will automatically receive the selected message or you can send a text message you select in response to an internal call, **Silent Text Message**.

There are 11 **Custom Display Messages** each up to 24 characters. Ten can be assigned by the Attendant and one assigned by you, see *Station Speed Dial Character entry chart*.

In addition, there are ten fixed Pre-defined Text Messages; some allow auxiliary input for time, date, etc. (as shown in message list).

Message 1:	LUNCH RETURN AT hh:mm
Message 2:	ON VACATION RETURN AT DATE mm:dd
Message 3:	OUT OF OFFICE RETURN AT TIME hh:mm
Message 4:	OUT OF OFFICE RETURN AT DATE mm:dd

Message 5:	OUT OF OFFICE RETURN UNKNOWN
Message 6:	CALL (enter up to 17 digits)
Message 7:	IN OFFICE STA xxxx
Message 8:	IN MEETING RETURN AT TIME hh:mm
Message 9:	AT HOME
Message 0:	AT BRANCH OFFICE
Message *:	User Custom Message
#:	Deactivate

In iPECS-LIK

To activate Custom or Pre-Defined Message Forward:

- Press TRANS/PGM,
- Dial User Program feature code 51,
- Dial the two-digits text Message code (01-10: Pre-Defined, 00: Customer),
- Dial any auxiliary input for messages 01-04 and 06-08,
- Press HOLD, forward confirmed.

To cancel activated Message:

- Press TRANS/PGM,
- Dial User Program feature code 51,
- Dial # and Press HOLD

To program the Station Custom Message (00) at your station:

- Press TRANS,
- Dial User Program feature code 52,
- Enter Message contents, up to 24 characters, using the following Character Entry Chart:

Q – 11 Z – 12 . – 13 1 – 10	A - 21 B - 22 C - 23 2 - 20	D - 31 E - 32 F - 33 3 - 30
G – 41 H - 42 I - 43 4 - 40	J - 51 K - 52 L - 53 5 - 50	M - 61 N - 62 O - 63 6 - 60
P - 71 R - 72 S - 73 Q - 7* 7 - 70	T - 81 U - 82 V - 83 8 - 80	W - 91 X - 92 Y - 93 Z - 9# 9 - 90
Blank - *1 : - *2 , - *3	0-00	#

- Press HOLD, message saved.

In iPECS-MG

To activate Custom or Pre-Defined Message Forward:

- Press TRANS/PGM,
- Dial User Program feature code 41,
- Dial the one-digits text Message code(0-9),
- Dial any auxiliary input for messages 01-04 and 06-08,
- Press HOLD, forward confirmed.

To cancel activated Message:

- Press TRANS/PGM,
- Dial User Program feature code 41,
- Dial # and Press HOLD

To program the Station Custom Message (00) at your station:

- Press TRANS,
- Dial User Program feature code 42,
- Enter Message contents, up to 24 characters, using the following Character Entry Chart:

Dial Pad button	Letter Type								
	Uppercase (ABC)				Lowercase(ABC)				Num
	Button depressions								
	1	2	3	4	1	2	3	4	1
1	@	:	/	<	@	:	/	<	1
2	A	B	C		a	b	c		2
3	D	E	F		d	e	f		3
4	G	H	I		g	h	i		4
5	J	K	L		j	k	l		5
6	M	N	O		m	n	o		6
7	P	Q	R	S	p	q	r	s	7
8	T	U	V		t	u	v		8
9	W	X	Y	Z	w	x	y	z	9
0	.	,	?	!	.	,	?	!	0
*	*				*				*
#	#				#				#

3. Placing Calls

3.1 Internal Calls

You can place calls to other stations in the system over the Intercom. The call will ring, or for an **ICM Voice Announce** call, a splash tone will be heard. Ring or Voice Announce is normally determined by settings at the called station but you may change this by dialing '#' after placing the call. By changing the mode, a ringing ICM call will allow Voice Announce.

You can assign a Flex button for **Direct Station Selection/Busy Lamp Field (DSS/BLF)**. The DSS/BLF button allows you to call another station with a single touch of the button.

When you go off-hook, you may connect to another station or system resource automatically. This **Prime Line Preference** may be immediate or delayed allowing you to take other actions during the delay. Otherwise, you may press another Flex button before going off-hook to override Prime Line Preference.

If you go off-hook and take no action, Intercom dial-tone will time-out, and after the **Howler tone** is received, your phone will be placed out-of-service in **Intercom Lock-Out**; you then must hang-up to return the phone to an idle state.

To place an Intercom call:

- Lift the handset,
- Dial the Intercom number of the desired station,
- When the call is answered or the Splash tone is heard, speak to the called party.

3.1.1 Using Camp-On when calling a busy station

If the called party is busy, you may activate **Camp-On**, **Callback** or **Voice Over** at the station. **Camp-On** allows you to wait off-hook for the called station to answer. **Callback** allows you to hang-up, and when the busy station returns to an idle state, the system will call your Station; after you answer the callback, the system will call the previously busy station.

If you are the Attendant or Secretary, you may activate **Intrusion**. You may also use **Step Call**; dial the next station by dialing just the last digit of the Intercom number.

In iPECS-LIK, iPECS SBG-1000, iPECS-MG

To Camp-On (wait off-hook) for a busy station:

- Call a busy station and press '*',
- Wait for party to answer.

To Callback (wait on-hook) for a busy station:

- Press the CALL BACK button and hang-up.

To make a Voice Over announcement to a busy station:

- Press '#', and after the Splash tone is heard, begin speaking.

3.1.2 To leave a Message Wait

If the called user does not answer or is in DND mode, you may leave a **Message Wait**. The called user will receive a Message Wait indication; the MSG LED will flash.

To activate Message Waiting:

- Press the CALL BACK button and hang-up.

3.2 External Calls

3.2.1 Placing external CO/VoIP calls

External calls are placed on DN buttons are accessed by a button on the iPECS Phone assigned as DN.

If **Least Cost Routing** is set-up, the number you dial will be analyzed and the system will place the call on the least expensive route.
You may be assigned **Dialing** and/or **CO/IP Line Access Restrictions**, in which case you will receive error tone if you attempt to dial or access a restricted number/CO/IP line. **CO/IP line** and **Class Of Service (COS)**, which establish dialing restrictions, may vary during Day and Night operation (**Day/Night COS**).
You may need to enter an *Authorization code* before placing calls, in which case you will receive a second dial tone.

To place an external call:

- Lift the Handset,
- Dial the CO access code,
- Dial the desired number.

3.2.2 Waiting for the next available CO/IP line

If all the lines connected to your system are busy, you will receive an All Trunks Busy signal. You may request to be notified when a line becomes free.

To activate a queue if the selected/dialed line is busy:

- Select/dial a busy CO/IP line,
- Press the CALL BACK button,
- Return to an idle state by going on-hook; when the line becomes available, the Station will be notified with ringing.

3.2.3 Account Codes: Tracking External calls for billing

In some cases, you or your company may desire to track calls for billing or other purposes. When an **Account Code** is entered, it is output from the system to a printer in the **SMDR** report. An **Account Code** Flex button can be programmed (refer to *Assigning features to Flex buttons*).

In iPECS-LIK

To enter an Account Code before the call:

- Lift the handset,
- Press the assigned Account Code button,
- Dial the Account Code (1-12 digits),
- Dial *, Intercom dial tone is heard,
- Place the CO/IP call as normal.

To enter an Account Code during a call:

- Press the assigned Account Code button,
- Dial the Account Code (1-12 digits),
- Dial *.

In iPECS-MG

To enter an Account Code before the call:

- Lift the handset,
- Dial 550,
- Dial the Account Code (1-12 digits),
- Dial *, Intercom dial tone is heard,
- Place the CO/IP call as normal.

3.2.4 To disable dialing from your phone

You can temporarily 'Lock' your phone by activating **Temporary COS**, which will disable dialing outside calls from the phone. To deactivate **Temporary COS** you must enter the Station's Authorization code.

In iPECS-LIK

To activate Temporary COS:

- Press TRANS/PGM,
- Dial Extension Class Down code (21),
- Press HOLD.

To deactivate Temporary COS:

- Press TRANS/PGM,
- Dial Extension Class Recover code (22),
- Dial your Authorization code (station number and code),
- Press HOLD.

In iPECS-MG

To activate Temporary COS:

- Press TRANS/PGM,
- Dial Extension Class Down code (31),
- Dial your Authorization code,
- Press HOLD.

To deactivate Temporary COS:

- Press TRANS/PGM,
- Dial Extension Class Recover code (32),

- Dial your Authorization code,
- Press HOLD.

3.2.5 To temporarily override dialing restrictions at a phone

Override the dialing restrictions at any phone by activating **Walking COS**. The **Walking COS** dialing restriction levels are applied for a single call only. For multiple calls, you will need to reactivate **Walking COS** or use the FLASH button to regain CO/IP dial-tone.

In iPECS-LIK

To activate Walking COS:

- Press TRANS/PGM,
- Dial User Program code 23,
- Dial your Authorization Code (Station number and password),
- Place call as normal.

In iPECS-MG

To activate Walking COS:

- Press TRANS/PGM,
- Dial User Program code 33,
- Dial your Authorization Code (Station number and password and *),
- Place call as normal.

3.3 Using Automated Dialing

3.3.1 Using Last Number Redial (LNR)

The last number dialed on an external call is automatically saved in the **Last Number Redial (LNR)** buffer.

In iPECS-LIK, iPECS SBG-1000

To dial the Last Number for an external call:

- Dial Last Number Redial code
  Or
- Press SPEED button and '*',
- Use Vol Up/Vol Down or Navigation buttons to select the desired number,
- Press HOLD.

In iPECS-MG

To dial the Last Number for an external call:

- Dial Redial code
  Or
- Press SPEED button and '*'.

3.3.2 Using and Entering Saved Number Dial

You may store the last number dialed on an external call to the **Saved Number Dial** buffer for convenient dialing at a later time. The Saved number is stored until a new number is saved.

In iPECS-LIK, iPECS SBG-1000

To place a call using Saved Number Dial:

- Lift the handset,
- Press SPEED.
- Dial #

To store a number in the Saved Number Dial:

- While on an outgoing external call, press SPEED twice.

In iPECS-MG

To place a call using Saved Number Dial:

- Lift the handset,
- Press SPEED.
- Dial #

To store a number in the Saved Number Dial:

- While on an outgoing external call, press SPEED twice.

3.3.3 Using System Speed Dial Numbers

The iPECS-CM system has 3000 **System Speed Dial** numbers. The iPECS SBG-1000 & Micro & 50 & 100 system has 800 **System Speed Dial** numbers. The iPECS-300 has 3000 **System Speed Dial** numbers. The iPECS-600 system has 6000 **System Speed Dial** numbers. The iPECS-1200 system has 12000 **System Speed Dial** numbers. You may, if allowed, use **System Speed Dial** to call frequently dialed numbers.

In iPECS-LIK, iPECS SBG-1000, iPECS-MG

To place a call using System Speed Dial Bin:

- Press SPEED button,
- Dial the desired System Speed dial bin number (200-999 for iPECS SBG-1000 & Micro & 50 & 100, 2000-4999 for iPECS-300, 2000-7999 for iPECS-600, 20000-31999 for iPECS-12000, 2000-2999 for iPECs-MG100 , or 2000-3999 for iPECS-MG300).
  Or
- Press the assigned System Speed Dial button.

3.3.4 Using and Entering Station Speed Dial Numbers

Each station in the iPECS-CM System is allocated memory for 100 **Station Speed Dial** numbers. The iPECS SBG-1000 & Micro & 50 & 100 support 20 **Station Speed Dial** numbers. The iPECS-300 & 600 & 1200 support 100 **Station Speed Dial** numbers.

You can easily program each speed dial bin with telephone numbers, up to 23 digits, to meet your needs. The numbers may include several 'special' instructions:

PAUSE will momentarily stop dialing.

FLASH as 1st digit—Activate dial tone detect.

FLASH not as 1st digit—The system will generate a ***flash on the CO line***.

When entering a **Speed Dial**, a 16 character name may be associated with the number for ***Dial by Name***.

In iPECS-LIK, iPECS SBG-1000, iPECS-MG

To place a call using Station Speed Dial Bin:

- Press SPEED button,
- Dial the desired Station Speed dial bin number.
  Or
- Press the assigned Station Speed Dial button,

To enter a Station Speed Dial number with CO Line and Name:

- Press TRANS/PGM and SPEED button,
- Dial Speed bin number,
- Dial CO Access Code, (Skip this step in iPECS SBG-1000)
- Dial the desired number you wish to store,
- Press HOLD,
- Enter the name associated the number, if desired, using the following Character Entry Chart,
- Press HOLD.

Dial Pad Button	Letter Type								
	Uppercase (ABC)				Lowercase (ABC)				Num
	Number of Button depression								
	1	2	3	4	1	2	3	4	1
1	@	:	/	<	@	:	/	<	1
2	A	B	C		a	b	c		2
3	D	E	F		d	e	f		3
4	G	H	I		g	h	i		4
5	J	K	L		j	k	l		5
6	M	N	O		m	n	o		6

7	P	Q	R	S	p	q	r	s	7
8	T	U	V		t	u	v		8
9	W	X	Y	Z	w	x	y	z	9
0	.	,	?	!	.	,	?	!	0
*	*				*				*
#	#				#				#

Character Entry Chart

3.3.5 Dial by Name and Entering Your Name

Dial by Name employs three different Directories: Private directory (Station Speed dial), Public Directory (System Speed dial), or Intercom directory.

NOTE—To allow others to contact you via the Intercom directory, you must enter a name for your station (up to 12 characters).

Characters are entered with two keystrokes as in the chart below.

Q – 11 Z – 12 . – 13 1 – 10	A - 21 B - 22 C - 23 2 - 20	D - 31 E - 32 F - 33 3 - 30
G – 41 H - 42 I - 43 4 - 40	J - 51 K - 52 L - 53 5 - 50	M - 61 N - 62 O - 63 6 - 60
P - 71 R - 72 S - 73 Q - 7* 7 - 70	T - 81 U - 82 V - 83 8 - 80	W - 91 X - 92 Y - 93 Z - 9# 9 - 90
*1 - Blank *2 - : *3 - ,	0-00	#

Character Entry

3.3.6 ACNR: To retry a busy external number until answered

When making an external call and a busy signal is received, the system can be set to retry the number until the call is connected, the feature is cancelled, or the maximum number of retries is attempted—this is Automatic Called Number Redial (ACNR).

For each retry, the system will activate your speaker then place the call with the microphone muted. When the remote end answers, you must select the SPEAKER button or lift the handset. Either of these actions will cancel the ACNR request as well as connect you to the remote party. A Redial button must be assigned at the station.

In iPECS-LIK, iPECS SBG-1000, iPECS-MG

To set up an ACNR, while on an outgoing call:

- Press the assigned Redial button
- Hang-up handset.

To cancel the ACNR request:

- Press the assigned Redial button

4. Call Handling

4.1 Call Transfer: Sending a call to a different destination

You can send an active call to another station or other resource of the system, using **Call Transfer**. You can screen the transfer with the receiving party (**Screened Call Transfer**) or complete the transfer without screening (**Unscreened Call Transfer**).
Transferred calls, internal or external, are placed in **Transfer Hold**. These calls will receive Music on Hold (***MOH***) and will recall if not answered in a timely manner.
If an **Unscreened Transfer** call encounters an error or DND, it may immediately recall at your Station.
DSS/BLF buttons may be used to transfer calls.

To Transfer an active call:

- While on an active call, press TRANS/PGM,
- Call the transfer party,
- Unscreened Call Transfer - Hang-up,
  OR
- Screened Call Transfer - When call is answered or Splash tone is heard, announce the call and then hang-up.

4.2 Call Hold: Placing a call in a waiting state

You may place an active Internal or External call in one of several holding states. In System Hold, other non-restricted stations may pick-up the call. In Exclusive Hold, only the holding station may pick-up the call.
The system is assigned a preferred hold type (System or Exclusive). You may override this **Hold Preference** by pressing the HOLD/SAVE button twice.
There are also user operations such as pressing a DSS/BLF button that will place a call in **Automatic Hold**.
Calls will remain in the held state for a period and then recall the user. This **Hold Recall** is provided with a different ring signal. If not answered in a timely manner, the Attendant will receive **Attendant Hold Recall**.

To Place a call on Hold:

- Press HOLD,

4.3 Joining multiple people in a Conference

You can establish a **Conference** with up to 3 parties, 32 parties when using a MCIM (iPECS-LIK) or 128 parties when using a Multi-Party Conference Interface Module (VPCM). The other parties in the **Conference** may be internal or external.

A **Conference** can be placed on Hold and is subject to *Hold Recall*.

You may also use the Conference operation to join 2 external parties in a private conversation. This is an **Unsupervised Conference**, which is not subject to the normal Hold Recall operation.

A CONF button should be programmed at first.

In iPECS-LIK, iPECS SBG-1000

To establish an Conference:

- Establish first call,
- Press the assigned CONF button. The connected party is placed on exclusive hold and the user receives dial tone,
- Place second call,
- When connected, press the assigned CONF button, new call is placed on exclusive hold,
- Press the assigned CONF button to establish conference.

To set up an Unsupervised Conference:

- Establish normal conference,
- Press the assigned CONF button.

To retrieve an Unsupervised Conference:

- Lift the handset,
- Press the assigned CONF button.

4.3.1 Setting up a Conference Room

In addition to establishing a Conference, up to 9 (iPECS-LIK) **Conference Rooms** can be set up, letting up to 32 parties converse when using a MCIM or up to 128 parties converse when using a VPCM. When setting up a Conference Room, a password can be designated for invited parties (internal and external parties) to use for accessing the established Conference Room.

In iPECS-LIK

To set-up a Conference Room:

- Press the TRANS/PGM button,
- Dial 53 to create a Conference Room,
- Dial the desired Conference Room number (1~9),
- If desired, enter a password for the Conference Room (must be exactly 5 digits),
- Press HOLD.

To join a Conference Room:

- Lift the handset,
- Dial the Conference Room entry code,
- Dial the Conference Room number,
- Dial the Conference Room password.

To delete a Conference Room:

- Press the TRANS/PGM button,
- Dial 54 (Conference Room delete code),
- Dial the Conference Room number (1~9),
- Dial the Conference Room password.
- Press HOLD.

In iPECS-MG

To set-up a Conference Room:

- Press the TRANS/PGM button,
- Dial 54 to create a Conference Room,
- Dial the desired Conference Room number (571-579),
- If desired, enter a password for the Conference Room (up to 12 digits),
- Press HOLD.

To join a Conference Room:

- Lift the handset,
- Dial 571-579(Conference Room entry code),
- Dial the Conference Room password.

To delete a Conference Room:

- Press the TRANS/PGM button,
- Dial 55 (Conference Room delete code),
- Dial the Conference Room number (571-579),
- Dial the Conference Room password.
- Press HOLD.

4.4 Call Park: Placing a call on hold to Page

A user may transfer an active CO/IP call to a special holding location (Park Orbit), which can be accessed easily from any station in the system. Typically, this feature is used with *Paging* to notify the desired User of **Call Park**.

Parked calls are subject to *Hold Recall* after the **Call Park** timer.

In iPECS-LIK, iPECS SBG-1000

To park an active external call:

- Press TRANS/PGM,
- Dial the Call Park Location code,
- Return to idle.

To retrieve a parked call:

- Lift the handset,
- Dial the Call Park Location code.

In iPECS-MG

To park an active external call:

- Press TRANS/PGM,
- Dial the Park Orbit (541),
- Dial the Park number (00~49)
- Return to idle.

To retrieve a parked call:

- Lift the handset,
- Dial the Park Orbit (541),
- Dial the Park number (00~49).

5. Retrieving & Responding to Messages

5.1 Responding to a Station Message Waiting Indication

Another station can leave a Station **Message Waiting** indication when you do not answer or your phone is in *DND*. If Ring/Message Indicator LED is programmed to Message Wait Indication, then the Ring/Message indicator LED will be flashing to indicate a Message Waiting. As a further notification, a **Message Wait Reminder Tone** can be provided. You may respond with a call back.

In iPECS-LIK, iPECS SBG-1000

To respond to your Station messages:

- Press CALL BACK , either the message contents summary is shown or the station messages waiting is listed,
- If the message contents summary is shown, dial '1' to select ST (Station Message Wait),
- Press CALL BACK to return a call for the oldest station message.

In iPECS-MG

To respond to your Station messages:

- Press CALL BACK to return message.

5.2 Getting Voice Mail Messages

When callers are forwarded or recall to your Voice Mail Box, they can leave a voice message. Your Voice Mail Box is part of the integrated **Voice Mail** module, an external Voice Mail system.

These Voice Mail systems allow access to and management of the received voice messages. While in your Mail Box, you have control of your password and Mail Box greeting. In addition, you can remotely control Call Forward for your station to Voice Mail. You will need to register an *Authorization Code* (station number

and password) for your station to access VSF/VMIM/VPCM Voice messages.

In iPECS-LIK, iPECS SBG-1000

To retrieve Voice Mail locally using a Flex button:

- Press the assigned VOICE MAIL Flex button,
- Enter the authorization code(station number and password); the "Number of Messages" prompt is played,
- Dial desired option codes,
- At completion of session, hang-up to return to idle.

To retrieve Voice Mail locally:

- Press CALL BACK, either the message contents summary is shown or the number of voice mails is shown,
- If the message contents summary is shown, dial '3' (iPECS-LIK) / '2' (iPECS SBG-1000) to select VSF messages,
- Press CALL BACK,
- After the prompt enter your station number and password,
- Dial desired option codes,
- At completion of session, hang-up to return to idle.

To access Voice Mail Box from a Remote Location:

- Lift the handset,
- Dial the telephone number of a CO line assigned for answer by the VSF Auto Attendant,
- Upon answer, dial '#', "Enter your password" prompt is played,
- Enter the Authorization code(station number and password),
- Dial desired option codes,
- At completion of session, hang-up.

In iPECS-MG

To retrieve Voice Mail locally:

- Press CALL BACK,
- After the prompt enter your station number, password,
- Dial desired option codes,
- At completion of session, hang-up to return to idle.

To access Voice Mail Box from a Remote Location:

- Lift the handset,
- Dial the telephone number of a *DISA* CO line assigned for answer by the Auto Attendant,
- Upon answer, dial 523 (VMIB Access Code),
- Dial the Mail Box and password to receive the 'Number of Messages' prompt.
- Dial desired option codes,
- At completion of session, hang-up.

6. Remote System Access

6.1 Direct Inward System Access (DISA)

DISA (Direct Inward System Access) allows remote users to gain access to the system's resources (remote users may be required to enter an ***Authorization Code***). The system will recognize remote user dialed inputs (call other stations, place calls over CO/IP lines, review voice mails, etc). The iPECS SBG-1000 system does not support normal DISA service, but supports call to the station and remote voice mail access when answering by a VSF auto attendant.

In iPECS SBG-1000

To call to the station remotely:

- Call the telephone number of a CO line assigned for answer by a VSF auto attendant,
- Upon answer, dial station number

In iPECS-LIK, iPECS-MG

To access system resources remotely:

- Call the system's DISA facility,
- Dial your Authorization code(station number and password),
- Dial '*' for end mark (iPECS-MG),
- Dial as needed for the desired system resource.

6.2 Mobile Phone Extension

When away from your desk or office you can place and receive calls on a registered mobile phone. Calls to your iPECS Phone will ring your Mobile Phone and you can place calls using the resources of the iPECS. You may need to activate the Mobile Phone Extension feature and assign the Mobile Phone number.
This feature is activated through an ISDN/VOIP CO line.

In iPECS-LIK, iPECS SBG-1000

To register a mobile phone number: (iPECS-LIK)

- Press the TRANS/PGM button,
- Dial 37,
- Dial the mobile phone number,
- Press the HOLD button.

To activate a registered mobile phone: (iPECS-LIK)

- Press the TRANS/PGM button,
- Dial 38,
- 1 to activate, 0 to deactivate,
- Press the HOLD button.

To place a call from the mobile extension using the iPECS System:

- Dial the ISDN DID number of the station; the system will check the Caller ID and answer the call. The user then will receive intercom dial tone,
- Place internal or external iPECS call as normal.

To Transfer a call from the mobile extension using the iPECS:

- Dial * while on an iPECS call,
- Dial the desired extension, the call is transferred and the mobile phone returns to idle.

In iPECS-MG

To register a mobile phone number:

- Press the TRANS/PGM button,
- Dial 51,
- Select Mobile Index 1 or 2,
- 1 to activate, 0 to deactivate,
- Press the HOLD button.

To activate a registered mobile phone from the user's station:

- Press the TRANS/PGM button,
- Dial 52,
- Select Mobile Index 1 or 2,
- Dial the mobile phone number with CO Access code,
- Press the HOLD button.

To place a call from the mobile extension using the iPECS System:

- Dial the ISDN DID number of the station; the system will check the Caller ID and answer the call. The user then will receive intercom dial tone,
- Place internal or external iPECS call as normal.

To Transfer a call from the mobile extension using the iPECS:

- Dial the mobile flash digit "*" while on an iPECS call,
- Dial the desired extension, the call is transferred and the mobile phone returns to idle.

7. Misc. Features

7.1 Background Music and Music on Hold (iPECS-LIK)

Two audio sources can be connected to the system. These sources or an internal source provide input for Background Music (BGM) and Music On Hold (MOH). In addition, a recorded message from the VMIM can be used. BGM is played over the speakers of the iPECS Phone when the station is idle. MOH is played to callers placed on ***Hold***.

There are eleven possible selections for BGM and MOH:
00: Off
01: Source BGM1
02: Source BGM2
03: VSF MOH 1
04: SLT MOH 1
05: SLT MOH 2
06: SLT MOH 3
07: SLT MOH 4
08: SLT MOH 5
09: VSF MOH 2
10: VSF MOH 3

To turn on Background Music:

- Press TRANS/PGM,
- Dial '73' to BGM code,
- Dial 00-10 to select hear and select the BGM,
- Press HOLD to save your selection.

7.2 Using Internal, External and Meet-Me Paging

The User can broadcast announcements to other stations and/or external speakers. Stations are assigned to one or more of the **Internal Page Zones**. Users can also request a paged party answer the Page using Meet-Me Paging. In this case, the paged party may answer the page from any phone in the system by dialing the Meet-Me code.

In iPECS-LIK, iPECS SBG-1000

To make a page:

- Lift the handset,
- Dial Page zone code,
- If assigned, after page warning tone, make announcement.

To answer a Meet-me-Page:

- Lift the handset.
- Dial Meet-Me-Page code**.**

In iPECS-MG,

To make a page:

- Lift the handset,
- Dial Page code and the desired Page zone,
- If assigned, after page warning tone, make announcement.

To answer a Meet-me-Page:

- Lift the handset.
- Dial 546(Meet-Me-Page code)**.**

7.3 Push-To-Talk (PTT) Page (iPECS-LIK, iPECS-MG)

iPECS Phones can be assigned as a member of one or more of the system's nine Push-To-Talk (PTT) page groups. Users separately log-in or log-out of any one or all PTT groups to which the phone is assigned. Once logged in, place or receive one-way page announcements to/from other users who are logged in to the same PTT group.

In iPECS-LIK

To log-in to a PTT group:

- Dial the PTT Log-in/out code.
- Dial the desired PTT group number (1-9, 0).

To log-out of the PTT group(s):

- Dial the PTT Log-in/out code.
- Press the * key.

To place a page to the active PTT group:

- Press and hold the PTT button.
- After confirmation tone make page announcement.

To assign a PTT Flex button:

- Press TRANS/PGM,
- Press the flexible button to be assigned.
- Dial '99'
- Press HOLD.

In iPECS-MG

To log-in to a PTT group:

- Dial the PTT Log-in/out code.
- Dial the desired PTT group number (1-9, 0).

To log-out of the PTT group(s):

- Dial the PTT Log-in/out code.
- Press the * key.

To place a page to the active PTT group:

- Press and hold the PTT button.
- After confirmation tone make page announcement.

To assign a PTT Flex button:

- Press TRANS/PGM,
- Press the flexible button to be assigned.
- Press program type 1 (1: Fixed button, 2: Number, 0:Delete)
- Choose the button type as PTT using VOL ▲▼,
- Press HOLD.

7.4 Wake-Up Alarm

iPECS supports an Alarm Clock for each station. You can set the alarm clock to repeat daily or as a one-time alarm.

When responding to the alarm by lifting the handset, BGM or Wake-Up Alarm announcement (iPECS-LIK, iPECS SBG-1000) will be provided.

In iPECS-LIK, iPECS SBG-1000, iPECS-MG

To set the Wake Up Alarm clock:

- Press TRANS/PGM,
- Dial the Station User program Code 41 (iPECS-LIK) / 21 (iPECS SBG-1000)/13(iPECS-MG),
- Dial hh/mm for time alarm should alert,
- Press # to have the alarm repeat daily,
- Press HOLD.

To erase Wake-Up:

- Press TRANS/PGM,
- Dial the Station User program code Code 42 (iPECS-LIK) / 22 (iPECS SBG-1000/14(iPECS-MG),
- Press HOLD.

7.5 System Voice Memo (iPECS-LIK, iPECS-MG)

The integrated Voice Mail modules incorporate several **Voice Memos** to provide Station Users with general information such as station number, date, time, and feature status. Voice Memos can be heard over the speaker or handset of the iPECS Phone and over the handset for SLTs.

For the **Station Status Memo**, the following items are reported:

ICM Signaling Mode (Handsfree/Tone/Privacy)

Station IP Address

Station Mac Address

Number of messages x (x: number of all message waiting)

Wake-Up Time (hh:mm)

Do Not Disturb

Forwarded to station xxx

Forwarded to speed bin xxx

Queued CO/IP line xxx

Locked (Temporary COS)
COS x

To hear Date & Time memo:

- Dial “Information voice announce” feature code and dial 1, date and Time memo is heard, “Date is May 2nd.Time is xx:xx pm”.

To hear Station Number Prompt:

- Dial “Information voice announce” feature code and dial 2, the Station Number memo is heard, “This is station 1500”.

To hear Station Settings:

- Dial “Information voice announce” feature code and dial 3, Station Status Memo is heard.

8. Set Features & Flex Buttons

8.1 Entering Station Program Data

A special code set is available for iPECS Phone users to assign certain attributes such as Authorization Codes (Passwords). After entering the **User Program** mode, dial the codes to select the attribute and setting. Once selected, the setting is saved. A list of the User Program codes, the feature/function and any input required are given in *Appendix B*.

To assign User Programmable station attributes:

- Press TRANS/PGM,
- Dial desired User Program code,
- Press HOLD.

8.2 Assigning Features to Flex Buttons

You may assign features and functions to the Flex buttons on your iPECS Phone. If allowed, you may even assign CO/IP lines to the Flex buttons.
Flex buttons may be assigned for most features providing **One-Touch** feature activation (e.g., a Flex button may be assigned to access the ***Account Code*** feature and may include the Account code digits, as a one-touch account code button).

Features that may be assigned to a Flex button include:
DSS/BLF—Enter station number.

Flex Numbering Plan—Enter Flex Numbering Plan code see ***Appendix A***(*Number Plan is not assigned by default).*

User Program Code – Dial "Program Mode" code or press [TRANS/PGM] button in iPECS-LIK, iPECS SBG-1000 and enter a User Program code, see *Appendix B*,

(Program Mode code is programmed in feature numbering plan by Administrator)

CO Line—Enter the CO line access code.

In iPECS-LIK, iPECS SBG-1000, iPECS-MG

To assign a feature to a Flex button:

- Press TRANS/PGM,
- Press the desired Flex button,
- Input number to dial
- Press HOLD.

To assign Fixed button to a Flex button:

- Press TRANS/PGM,
- Press the desired Flex button,
- Press TRANS/PGM, and user program code (Refer to the appendix B.)
- Press HOLD.

To delete feature:

- Press TRANS/PGM,
- Press the desired Flex button,
- Press HOLD.

8.3 Network configuration

You many review the current network configuration or modify a new phone network configuration.

To access Network settings:

- Press TRANS/PGM button and search (Network) or (Network Settings) – Dial '78'(iPECS-LIK) / '38'(iPECS SBG-1000) / '80'(iPECS-MG) or press TRANS/PGM button more than 2 seconds in iPECS-LIK or iPECS SBG-1000.
- Enter the password (default=147*); the following will display:

```
MFIM #[1/2]  ?
MFIM #1  - CHANGE[#]
```

- Press the # key to toggle between multiple profiles (MFIM),
- Press the VOL ▲▼ buttons to advance to the next network configuration item,
- Press the HOLD/SAVE button to save each setting.

To set LLDP:

- In Network Config. Menu, use VOL ▲▼ buttons to locate the LLDP configuration screen (shown),

```
LLDP?
[ENABLED] – CHANGE [#]
```

- Enable in LLDP? menu and press the Hold/Save button.

To set default Config. settings:

- In Network Config. Menu, use VOL ▲▼ buttons to locate the Default Config. Screen (shown),

```
SET DEFAULT CONFIG(DOT:*)
```

- Press the * key.

To exit Config. settings:

- Press the SPEAKER button,
- Press the * key to exit,
  OR
- Press the # key to Reset/Reboot the phone with new setting.

Appendix A User Program Codes

Code	Function	Code	Function
11	Answer Mode(H/T/P)	43	Send SMS MESSAGE
12	Station Name Program	44	Received SMS MESSAGE
13	Set Wake Up	51	Mobile-Ext. Enable
14	Reset Wake Up	52	Mobile-Ext. Number PGM
15	Language Program	53	Mobile-Ext. CLI PGM
16	LCD Date Mode Change	54	Create Conference Room
17	LCD Time Mode Change	55	Delete Conference Room
21	ICM Ring Type Program	61	Speaker/Headset PGM
22	CO Ring Type Program	62	Headset Ring Program
23	Ring Download	71	Register Station ICLID
31	Temporary COS Mode	72	View Station ICLID
32	Retrieve COS	80	Network Setting
33	Walking COS	81	View IP Address
34	Register Password	82	View Mac Address
35	Call Log Protect	83	View Keyset Version
36	SMS Message Protect		
41	Preselected MSG PGM		
42	Set User Message		

iPECS-LIK

Code	Function	Code	Function
10	Enblock Dial	73	Select BGM source
11	Intercom Differential Ring	74	User Name registration
12	CO/IP Differential Ring	75	Display Phone IP Address
13	Intercom Answer Mode	76	Change Phone IP Address
14	Call Coverage Attribute	77	Display Phone MAC Address

Code	Function	Code	Function
15	Station Ring Download	78	Network Configuration
19	Ear Mic Headset	79	Display Phone Version
21	Knock down Station COS	80	Record button
22	Restore Station COS	81	ISDN CLIR button
23	Walking COS	82	ISDN COLR button
24	ICR Scenario	83	ACD DND button
25	LIP Phone Statistics	84	Account Code button
31	Station Msg Wait Retrieve	85	LOOP button
32	CLI/IP Msg Wait Retrieve	86	Intrusion button
33	Register Authorization Code	87	ICM button
34	DID Call Wait	88	CAMP-ON button
35	Exec/Sec MWI	89	ISDN Keypad Facility button
36	Send SMS message	8#	Voice Over button
37	Register Mobile Extension	90	Speed button
38	Activate Moble Extension	91	Conference button
39	Register Mobile Extension CLI	92	Callback button
41	Set Wake-Up Time	93	DND button
42	Erase Wake-Up Time	94	Flash button
51	Custom/Pre-selected Message	95	Mute button
52	Register Custom Message	96	Monitor button
53	Create Conference Room	97	Redial button
54	Delete Conference Room	98	Call Forward button
55	Monitor Conference Group	99	Push-To-Talk button
57	Call Log Display button	*0	Hot Desk Login
61	Headset/Speakerphone mode	**	Hot Desk Logout
62	Select Headset Ring type	*7	Hunt Forced Call Forward

Code	Function	Code	Function
67	Call Coverage button	*8	Register Bluetooth device
71	LCD Display Language	*9	Activate Bluetooth device
72	Sys version display		

iPECS SBG-1000

Code	Function	Code	Function
11	Intercom Answer Mode	38	Network Configuration
12	Headset/Speakerphone mode	41	Forced FWD to Destination
13	Select Headset Ring type	42	Call Log Display
21	Set Wake-Up Time	43	CLIR Service
22	Erase Wake-Up Time	44	COLR Service
31	LCD Display Language	4*	LOOP button
32	Sys version display	50	CALLBACK button
33	Select BGM source	51	CONF button
34	User Name registration	52	MUTE button
35	Display Phone IP Address	53	ICM button
36	Display Phone MAC Address	54	REDIAL button
37	Display Phone Version		

iPECS-MG

Code	Function	Remarks
11	Intercom Answer Mode	1:H, 2:T, 3:P
12 + Name	User name creation	2 digit for each character
13 + Time	Set wake-up alarm time	HH/mm, 24-hour clock
14	Cancel Wake-up Alarm	
15	Set language for the display	00-14
16	LCD Date Mode Change	DD/MM/YY or MMDDYY
17	LCD Time Mode Change	12 Hour/24 Hour
18	Set Backlight	0-2

Code	Function	Remarks
21	ICM Ring Type	
22	TRK Ring Type	
23	Ring Download	LIP-Series Only
24	Back Ground Music	
31	Temporary COS	Auth. Code required
32	Retrieve COS	Auth. Code required
33	COS Override (Walking COS)	Auth. Code required
34	Register Password	
35	Call Log Protect	
36	SMS Message Protect	LIP-Series/LDP6000-Series
41 + MSG number [xx]	Set Pre-defined Message.	0-9, MSG *: User Custom # Deactivation
42	Create a Station User Message	
43	Send SMS Message	LIP Series/LDP6000 Series
44	Receive SMS Message	LIP Series/LDP6000 Series
51 + x	Activate a mobile phone	X=1-2
52 + x	Register the mobile number	X=1-2
53 + x	Register the mobile CLI number	X=1-2
54 + Rm & Auth Code	Start a Conf Room	
55 + Rm & Auth Code	Close a Conf Room	
61	Speaker/Headset Mode	Speak/Headset/E-MIC
62	Headset Ring Mode	Speaker/Headset/Both
71	Register Station ICLID	
72	View Station ICLID	
81	View IP Address	IP Phone/ DTIM/SLTM
82	View Mac Address	IP Phone/ DTIM/SLTM
83	View IP Phone version	
80	Network Setting	LIP Series
91	System Version	
92	System IP Address	

Appendix B Useful Information : Open Source Software Notice

Open Source Software Notice

This following GPL (General Public License) software used in this product are subject to the GPL License Agreements.
You can obtain a copy of the GPL licenses from Ericsson-LG Web Site (http://www.ericssonlg.com).

GPL License:

1. **u-boot**
2. **bash**
3. **linux**
4. **busybox**
5. **Alsa Libraries**
6. **udhcpc**
7. **ortp**
8. **Curl / LibCurl**
9. **libsrtp**
10. **Expat xml parser**

Ericsson-LG offers to provide source code to you on CD-ROM for a charge covering the cost of performing such distribution, such as the cost of media, shipping and handling upon e-mail request to Ericsson-LG at. : opensource@ericssonlg.com.
This offer is valid for a period of three (3) years from the date of the distribution of this product by Ericsson-LG.

iPECS

LIP-8008E

User Guide

Please read this manual carefully before operating Phone. Retain it for future reference

iPECS is an Ericcson-LG Brand

ERICSSON LG

Revision History

Issue	Date	Remark
1.0	Mar. 2012	Initial Release
1.1	Oct. 2012	Changed CI to Ericsson-LG

Disposal of your old appliance

1. When the crossed-out wheeled bin symbol is attached to a product, it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by government or the local authorities.
The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

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Important Safety Information

To prevent unexpected danger or damage please read this information before installing or attempting to repair you phone. Warning and Caution information is provided to alert the consumer of known dangers:

Warning: To reduce the possibility of electric shock, do not expose your phone to high humidity areas, such as a bathroom, swimming area, etc.

Caution: Use only Ericsson-LG approved batteries and desktop chargers to avoid the damage to the phone. Using other batteries or chargers voids your warranty and may cause an explosion.

Warning

1. Only trained and qualified service personnel shall install, replace or service the phone.
2. Do not spill liquid life water on the phone. If so, call the service center as this may result in fire or electric shock.
3. If you see smoke or smell something during use, unplug the power cord and the phone line. Call the service center immediately.
4. If the power adapter is used, do not touch the plug with wet hands. This may result in a fire or an electric shock or equipment damage.
5. Do not use the phone during a thunderstorm. Lightning strike may result in fire, severe electrical or acoustic shock.
6. Do not use the power adapter if the power cord or wall outlet is damaged. This may result in fire or an electric shock.

Caution

1. Ensure that children do not pull on phone cords. This may injure children or result in equipment damage.
2. The ear-piece houses a magnetic device which may attract pins or small metal objects. Keep headset clear of such objects and check before use.
3. Avoid placing the phone in an area that is excessively dusty, damp or subject to vibration.
4. Choose a site for the phone that is well-ventilated and dry.
5. Do not plug multiple plug-packs into one power outlet. This may result in the plug overheating and may result in a fire or plug pack failure.
6. Do not put heavy things on the phone.
7. Do not drop or throw the phone.
8. Static electricity discharge will damage electronic components.
9. Keep out of direct sunlight and away from heat.
10. No user-serviceable parts inside. Do not insert a screwdriver or any metal objects into the phone. This may cause electric shock or damage the equipment and will render the warranty void.
11. Clean the phone with a soft, dry cloth only. Do not use volatile liquids such as petrol, alcohol, or acetone as this may cause a fire or result in discoloration or damage to plastics. Do not clean with wax or silicon products as these may enter the equipment and cause operation to become unstable.

[EU]

European Union Declarations of Conformity

Ericsson-LG Co., Ltd. declare that the equipment specified in this document bearing the " CE" mark conforms to the European Union Radio and Telecommunications Terminal Equipment Directive(R&TTE 1999/5/EC), including the Electromagnetic Compatibility Directive(2004/108/EC) and Low Voltage Directive(2006/95/EC).
Copies of these Declarations of Conformity (DoCs) can be obtained by contacting your local sales representative.

[USA/CSA]

FCC/IC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 /RSS-GEN of the FCC/IC rules. Operation is subject to the following two conditions:
(1)This device may not cause harmful interference; and (2) This device must accept any interference received, including interference that may cause undesired operation.
This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.
The use of this device in a system operating either partially or completely outdoors may require the user to obtain a license for the system according to the Canadian regulations.

CAUTION : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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1. Introduction

1.1 General

Your telephone is connected to an advanced-technology, highly-versatile, fully-featured telecom system designed to make office communications easy and productive. Employing state-of-the-art Voice over Internet Protocol (VoIP) technology, voice and data converge on a single IP packet network. Because each iPECS Phone is an IP appliance, it can be moved easily throughout the office LAN and maintain normal operation.

1.2 Feature Information

We have taken every effort to make this user guide simple and straightforward. The guide starts with the simpler operations of the iPECS Phone, and moves on to receiving and placing calls, and then to more advanced features. Each section includes a brief and basic description of each feature and step-by-step operation instructions.

The operations shown in this guide use the System's base default Numbering Plan. Your specific Numbering Plan may be different. Some features may not be available for you to access or may be subject to certain limitations based on the set-up of the System (refer to your System Administrator and/or iPECS Technical Manuals as needed).

NOTE—Under certain operation conditions, this equipment cannot be relied upon to make emergency calls (loss of power, etc.). Alternative arrangements should be made for access to emergency services.

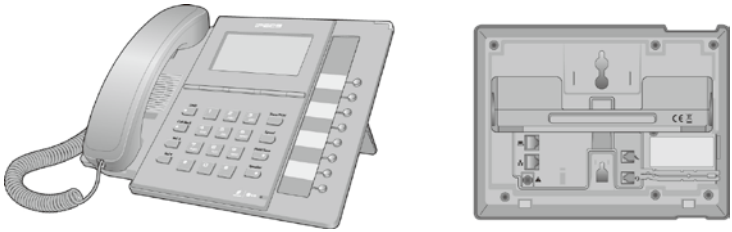
1.3 Feature Groupings

Every effort has been taken to divide the features into a logical and consistent sequence so that features can be quickly located.

Features have been divided into groups, *Receiving calls*, *Placing calls* etc. Within each group, features are arranged according to the difficulty of operation and frequency of use.

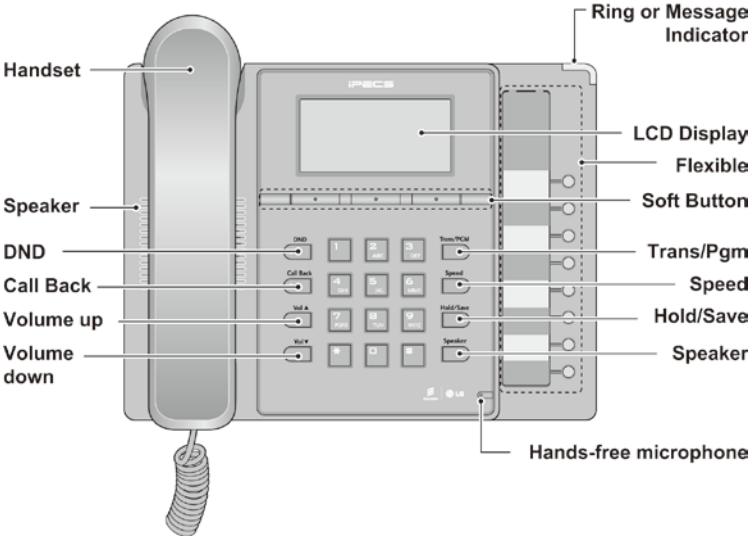
1.4 iPECS LIP-8008E Phone Description

The iPECS LIP-8008E Phone incorporates the latest in VoIP technology and is intended for basic communications (ex., a lobby or limited use phone). The following image shows the LIP-8008E.



LIP-8008E Front and Back

Features are generally accessed using programmed *fixed*, or *flexible buttons*, dial pad buttons, or dial codes entered from the dial pad. In the remainder of this User Guide, the Fixed or Flexible buttons are shown with a box surrounding the BUTTON designation. The following image shows the phone with button descriptions.

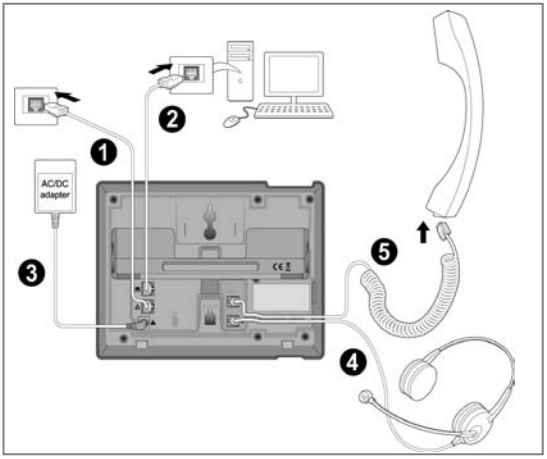


iPECS LIP-8008E Diagram

DND – Blocks all incoming calls; red LED illuminates.
Speed – Access speed dialing, speed programming.
Vol ▲ ▼ – Adjusts volume for ringing, headset, and speakerphone; adjusts LCD brightness (in idle state).
Trans/PGM –Call transfer, or programming mode.
Hold/Save – Places active call on hold or saves programming information.
Call Back – Initiates call back request when calling a busy station; call is completed when busy station returns to idle status.
Speaker – Allows User to place a call while on-hook. Toggle to activate; red LED illuminates.
Flexible – Some are system pre-programmed for line appearance, and some are user programmable.
Ring/MSG Indicator – Illuminates when ringing, or message waiting.
LCD Display – Phone interface for status, dialing directories, and text message information.
Soft Buttons – Used with fixed and flexible features; use changes in relation to LCD display.
Hands-free Microphone – Used for hands-free speakerphone function.

1.5 LIP-8008E Phone Installation

LIP Phones can be connected to any standard 10/100 Base-T Ethernet switch port (shown in graphic). When connected to an 802.3af compliant switch port (ex., POE8), LIP Phones obtain power from the Ethernet port. When LAN power is available, do not use AC/DC adaptor. When LAN power is not available, the AC/DC adaptor must be used. The following image shows how to connect the handset, power cord, and LAN cable to the phone.



iPECS LIP-8008E Connections

1.5.1 Wiring Connectors

The LIP-8008E has a two Ethernet ports one is connected to the LAN using a RJ-45 plug terminated category 5 cable supplied with the Phone, the other can be connected to a desktop PC. Using the cable, one RJ-45 plug is inserted into the "LAN" jack in the bottom of the Phone. The other RJ-45 plug is inserted into the RJ-45 jack previously wired to an Ethernet switch port accessible by the iPECS system. To power the LIP Phone over the LAN, the switch port must support POE (Power over Ethernet) standard 802.3af.

1.5.2 Power

All LIP-8000 series phones can be powered by the AC/DC Adapter-K- (48 VDC @0.3A) or over the LAN cable using the POE8 or other 802.3af compliant switch.

If using the AC/DC Adapter, after connecting the Phone to the LAN, the Adapter's DC voltage plug is inserted into the power-input jack in the underside of the Phone. One end of the AC power cord is inserted into the mating receptacle of the AC Adapter, and the other end is inserted into the AC power outlet.

1.5.3 Wall Mount

The LIP-8000 series phones can be wall mounted as needed. The following instructions detail how to perform a wall mount installation:

- Mark and drill two (2) 7mm holes for plastic wall anchors.
- Insert the two (2) anchors into the holes and insert and tighten each screw leaving about 2.5 mm (1/8-inch) of the screw exposed.
- Slide the LIP-8000 phone over the screws and assure the phone is secure.
- NOTE—It may be necessary to remove the phone and tighten or loosen the screws for a secure mounting.
- For the wall-mounting, sleeve of the CAT5 cable should be moved backward to prevent it protrude.

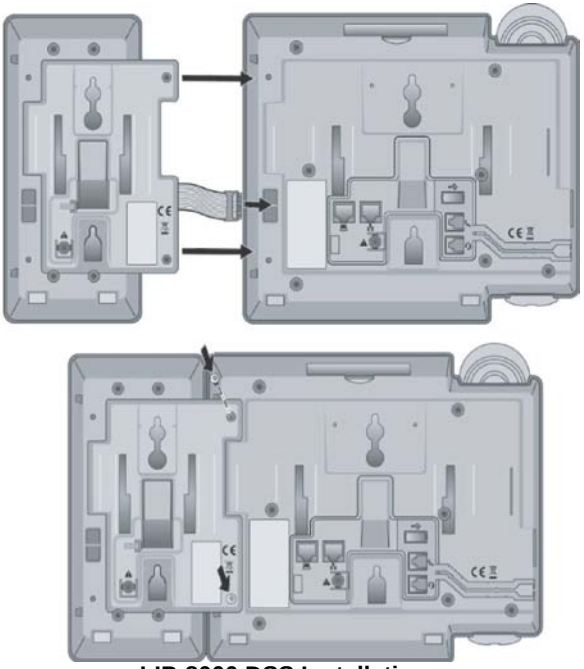
1.6 DSS(Direct Station Select) Console Installation

A DSS console can be installed with the LIP-8000E series phone as shown in Figure. Up to 3 consoles may be daisy chained as shown using the flat cable provided. Keep in mind the following conditions when installing LIP-8000 DSS consoles.

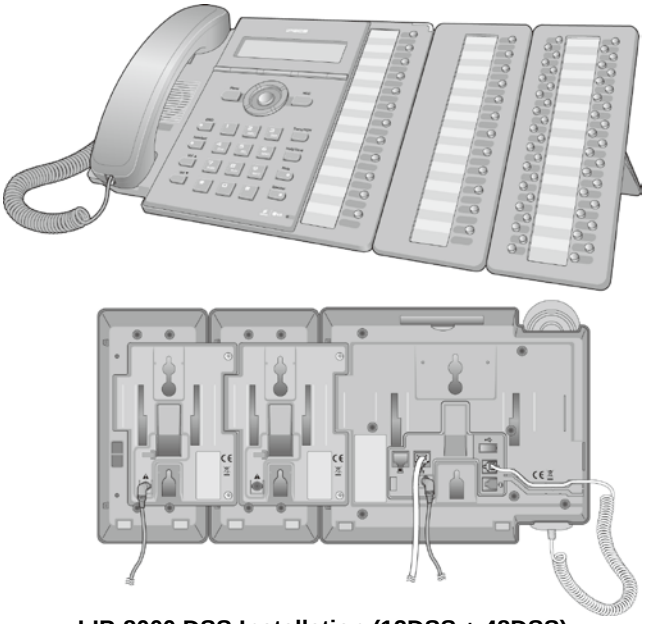
1. The AC/DC adapter must be used for LIP-8048DSS.
2. Up to two (2) LIP-8012LSS and/or LIP-8012DSS can be installed with LIP-8000E Phone.
3. The LIP-8048DSS must be separately powered.

The available DSS is as follows:

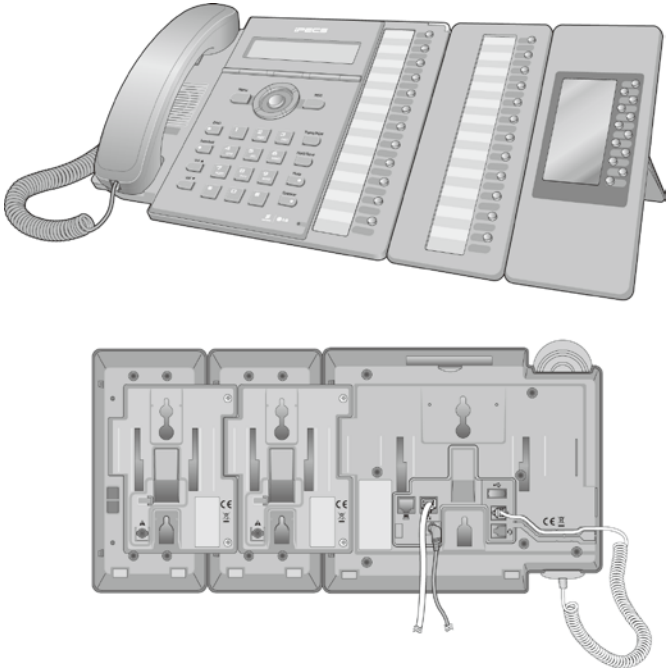
1) LIP-8012DSS
2) LIP-8012LSS
3) LIP-8048DSS



LIP-8000 DSS Installation



LIP-8000 DSS Installation (12DSS + 48DSS)

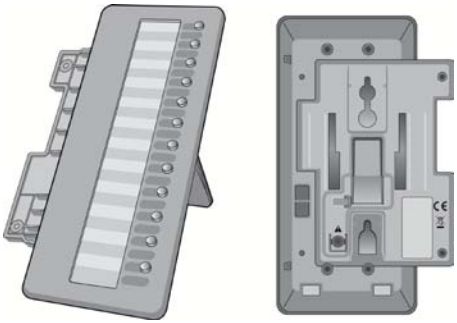


LIP-8000 DSS Installation (12DSS + 12LSS)

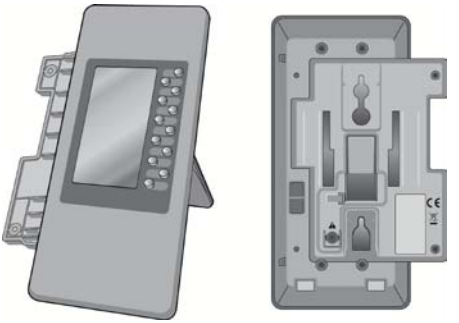
1.7 Using a Serial DSS

The LIP-8012ESS, LIP-8012LSS, and LIP-8048DSS can be connected with the LIP-8012E or LIP-8024E using the RS-232 cable. Be sure to verify the serial DSS and LSS capacities with the iPECS System to ensure usability (refer to iPECS Manual). The following graphics show the front and rear view of each.

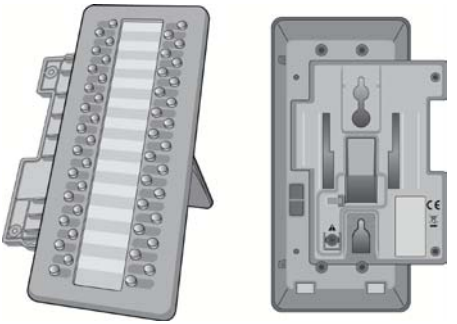
NOTE—A Linked Pair slave station cannot use a serial DSS. iPECS SBG-1000 does not support serial DSS.



LIP-8012ESS



LIP-8012LDSS



LIP-8048DSS

In iPECS-LIK

To use a Serial DSS:

- Verify the Station has Serial DSS Usage authority (Admin PGM111-Flex21),
- Verify the DSS power is OFF (LIP-8048DSS only),
- Power-OFF the phone,
- Connect the serial DSS to the phone,
- Power-ON the phone and the DSS (LIP-8048DSS only),
- Program the DSS button using Web Admin Programming or PGM115,
- Edit LSS label from Admin PGM129 (default label is provided from MFIM).

To initialize Serial DSS Database:

- Enter Admin PGM111-Flex21,
- Select Station range to clear Serial DSS Database,
- Dial 0,
- Press the HOLD/SAVE button.

In iPECS-MG

To use a Serial DSS:

- Set the Station's Serial DSS Usage Map (Admin PGM120-Flex2),
- Verify the DSS power is OFF (LIP-8048DSS only),
- Power-OFF the phone,
- Connect the serial DSS to the phone,
- Power-ON the phone and the DSS (LIP-8048DSS only),
- Program the DSS button using Web Admin Programming or PGM126,
- Edit LSS label from Admin PGM126.

To initialize Serial DSS Database:

- Clear the Station's Serial DSS Usage Map (Admin PGM120-Flex2),
- Admin PGM120-Felx3 to reset the phone.

2. Receiving Calls

2.1 Answering a Call While Idle

There are 3 basic types of incoming calls; internal/external calls, **Intercom Voice Announce** calls, and *Hold* recalls.

Your phone may be assigned **Ringing Line Preference**; in this case, calls that ring are answered by lifting the handset. Otherwise, you must press the flashing Flex button.

External calls to an iPECS Phone will appear under the CO/IP line button or a **LOOP** button. External calls are from CO lines or VoIP channels that are programmed to ring at your phone. For external calls, **Delay Ring** may be assigned allowing others to answer the call before the call rings at your phone.

Calls can be forwarded in some manner from another user; if providing call coverage for other users, you may also receive **Station Call Coverage** calls.

Calls placed on **Hold**, including Transfers, parked calls, etc., will **Recall** if left on hold for too long.

ICM Voice Announce calls are answered based on the **ICM Signaling mode** at the receiving phone; in Hands-Free (HF) mode, after the splash tone and announcement, speak normally into the microphone. In the Privacy (PV) mode, lift the handset to respond. The **ICM Signaling mode** can be assigned in *Station Programming*.

To answer a call ringing at your phone:

- Lift the handset and, then press the flashing Flex button (as needed), the call will be connected.

To respond to an Intercom Voice Announce call:

- Lift the handset to respond.

2.2 Responding to a Call While Busy

While you are busy on another call, you may receive a Muted Ring, Camp-On tones, or Voice-Over announcements. Muted Ring is provided over the speaker of your Phone indicating a **Call Waiting**. You also may receive **Camp On** tones, a burst of tone on top

of the existing call, as an indication of another call waiting.
While busy, certain stations can activate **Voice-Over** to your phone. When used audio is received from both the active call and the **Voice Over** announcement.
Respond to any of these Off-hook Signals by: placing the existing call on Hold and responding to the new incoming call, activating ***One-time DND***, sending a ***Silent Text Message***, or ignoring the new call.
Silent Text Message requires a TEXT MESSAGE button (not available on a SLT or other non-display terminal).
The Attendant or Secretary may use **Intrusion** to announce a call while you are busy.

To answer a Call Waiting:

- Press HOLD/SAVE, and/or
- Press the flashing FLEX button.

To activate One-time DND:

- Press the DND button.

To send a Silent Text Message:

- Press the programmed TEXT MESSAGE button,
- Select the desired message to send.

2.3 Differential Ring Signals

When multiple phones in a small area ring, it can be difficult to tell which are ringing. The iPECS Phone has 14 **Ring Tones** available for differentiating one phone's ringing from another. Four of the tones are stored in the phone permanent memory; the remaining ten tones are in the system memory. Four of these ten can be downloaded into the phone memory for use as the 5th to 8th **Ring Tone.**

In iPECS-LIK

To download a Ring Tone from System memory:

- Press TRANS/PGM,
- Dial 1 for Ring Tones,
- Dial 5 for Ring Tone download,
- Dial the phone's memory location to receive the tone (5-8),
- Dial 0-9 for the desired tone number; a confirmation tone is heard,
- Press HOLD/SAVE to download.

To select a Ring Tone from phone memory:

- Press the TRANS/PGM button,
- Dial 1 for Ring Tones,
- Dial 1 or 2 for Internal or External ring,
- Dial 1-8 for the desired tone number; a confirmation tone is heard,
- Press HOLD/SAVE to make the selection.
-

In iPECS-MG

To download a Ring Tone from System memory:

- Press TRANS/PGM,
- Dial 2 for Ring Tones,
- Dial 3 for Ring Tone download,
- Dial the phone's memory location to receive the tone (5-8),
- Dial 0-9 for the desired tone number; a confirmation tone is heard,
- Press HOLD/SAVE to download.

To select a Ring Tone from phone memory:

- Press the TRANS/PGM button,
- Dial 2 for Ring Tones,
- Dial 1 or 2 for Internal or External ring,
- Dial 1 for Keyset Ring Source,
- Dial 1-8 for the desired tone number; a confirmation tone is heard,
- Press HOLD/SAVE to make the selection.

2.4 Answering Calls at Night

In the Night mode, **Loud Bell Control** may be used to send ring signals to external bells. You may answer these calls with **Universal Night Answer (UNA)**.

To answer a call ringing during night mode:

- Lift the handset,
- Dial **567**(iPECS-LIK)/587(iPECS-MG) (UNA code)**.**

2.5 Answering Calls to Other Stations

When nearby stations are ringing, you may pick-up (answer) the call. Select to answer a call ringing at a specific station (**Directed Call Pick-Up**) or you may choose to answer the oldest call ringing to your station group (**Group Call Pick-Up**). Assign a Flex button with the Group Call Pick-Up code (566) for one-touch access.

NOTE—Pick-Up will not answer calls on the ringing station Private Line unless the line appears on your phone.

To answer a call ringing at another station:

- Lift the handset,
- Dial **7** (Directed Call Pick-Up code)**,**
- Dial the Intercom Number of the ringing station; call is connected.

To answer a call ringing at a station in your group:

- Lift the handset,
- Dial 566 (Group Call Pick-Up code), the call is connected.

2.6 Using Do-Not-Disturb (DND) to Block Incoming Calls

Activate Do-Not-Disturb (DND) when you wish not to be interrupted by pressing the DND button; the phone will block incoming calls. Internal callers will receive a fast busy tone and the display will show the DND status. Activate Do-Not-Disturb while busy (One-Time DND); DND will be active only for the duration of the present call, and requires a DND button.

When an Executive activates DND, calls are forwarded to the paired Secretary automatically.

The Attendants and Secretary may be able to activate **DND Override** and **Intrude** on an active call. The Attendants may also cancel DND at other stations.

To toggle DND ON and OFF:

- Press the DND button.

2.7 Forwarding Calls

2.7.1 Forwarding calls to another station or Voice Mail

Incoming calls may be diverted to other resources of the system. Resources include other stations, **VMIM/VSF Voice Mail** and **External Voice Mail**. Your LCD and the LCD of the forward receiver will both indicate the forward status.

Call Forward can be activated from your phone or from a different station (**Call Forward, Remote**). You may define the conditions or 'type of forward' as below:

1: Unconditional—All calls to the station, except recalls, are forwarded.

2: Busy—Immediately forwards all calls, except recalls, when the station is busy.

3: No Answer—Forwards all calls to the station, except recalls, when the station does not answer within the No Answer timer.

4: Busy/No Answer—Forwards calls if the station is busy or does not answer within the No Answer timer.

When you forward calls from a different station, you may need to enter your ***Authorization Code***.

Calls on a Private Line will not forward except to a station with an appearance of the Private Line or to Voice Mail.

To activate Call Forward from your phone to another phone or internal system resource:

- Lift the handset,
- Press FWD soft button ,
- Dial the type of forward code 1-4,
- Dial the destination number.

To deactivate Call Forward from your phone:

- Lift the handset,
- Press FWD soft button ,
- Press the # key.

To activate Call Forward for your phone from a different phone (Call Forward, Remote):

- Lift the handset,
- Press FWD soft button ,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization Code (Station number & Password),
- Dial the 'type of forward' code 1-4,
- Dial the destination number.

To deactivate Call Forward, Remote:

- Lift the handset,
- Press FWD soft button,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization Code (Station number & Password),
- Press the # key.

2.7.2 Forwarding calls to an external number

Forward calls to an external CO/IP destination; calls can be forwarded from an internal station or a remote location. You may define the conditions or 'type of forward' as below:

1: Unconditional—All calls to the station, except recalls, are forwarded internally or externally.

2: Busy—Immediately forwards all calls to the station, except recalls, when station is busy.

3: No Answer—Forwards all calls to the station, except recalls, when the station does not answer within the No Answer timer.

4: Busy/No Answer—Forwards calls if the station is busy or does not answer within the No Answer timer.

When you forward calls from a different station or a remote location, you may need to enter your *Authorization Code*. In addition, from a remote location, you must access the system through a *DISA* enabled CO line.

In IPECS-LIK, iPECS SBG-1000

To activate Call Forward, Off Premise (forward to an external number) from your phone:

- Lift the handset,
- Press FWD soft button,
- Dial the 'type of forward' code 1-4,
- Press SPEED,
- Dial Speed Dial bin number,
- Replace the handset, return to idle.

To activate Call Forward, Off Premise (forward to an external number) from a different phone:

- Lift the handset,
- Press FWD soft button,
- Dial the Remote Call Forward code 0,
- Dial your Authorization code (Station number & Password),
- Dial the 'type of forward' code 1-4,
- Press SPEED,
- Dial Speed Dial bin number,
- Replace the handset, return to idle.

To activate Call Forward, Off Premise (forward to an external number) from a remote location:

- Lift the handset,
- Dial the telephone number of a DISA assigned CO line,
- While receiving dial-tone, dial the Call Forward feature code 554,
- Dial your Authorization Code (Station number & Password),
- Dial the 'type of forward' code 6-9,
- Dial Speed Dial bin number,
- Replace the handset, return to idle.

In iPECS-MG

To activate Call Forward, Off Premise (forward to an external number) from your phone:

- Lift the handset,
- Dial 554 (Call Forward Register Feature Code),
- Dial the type of Forward code (1-4),
- Dial Telephone number,
- Replace the handset, return to idle.

To activate Call Forward, Off Premise (forward to an external number) from a different phone:

- Lift the handset,
- Dial 554 (Call Forward Register Feature Code),
- Dial 0 (Remote Call Forward code),
- Dial your Authorization code (your Station number + Password),
- Dial the type of Forward code (1-4),
- Dial Telephone number,
- Replace the handset, return to idle.

2.7.3 Forwarding callers to a Text Message

Using an iPECS Phone, the system can be setup to return a 'Text Message' to callers. When calling your Station, Internal callers will automatically receive the selected message or you can send a text message you select in response to an internal call, **Silent Text Message**.

There are 11 **Custom Display Messages** each up to 24 characters. Ten can be assigned by the Attendant and one assigned by you, see *Station Speed Dial Character entry chart*.

In addition, there are ten fixed Pre-defined Text Messages; some allow auxiliary input for time, date, etc. (as shown in message list).

In iPECS-LIK

Message 01:	LUNCH RETURN AT hh:mm
Message 02:	ON VACATION RETURN AT DATE mm:dd
Message 03:	OUT OF OFFICE RETURN AT TIME hh:mm

Message 04:	OUT OF OFFICE RETURN AT DATE mm:dd
Message 05:	OUT OF OFFICE RETURN UNKNOWN
Message 06:	CALL (enter up to 17 digits)
Message 07:	IN OFFICE STA xxxx
Message 08:	IN MEETING RETURN AT TIME hh:mm
Message 09:	AT HOME
Message 10:	AT BRANCH OFFICE

In iPECS-MG

Message 1:	LUNCH RETURN AT hh:mm
Message 2:	ON VACATION RETURN AT DATE mm:dd
Message 3:	OUT OF OFFICE RETURN AT TIME hh:mm
Message 4:	OUT OF OFFICE RETURN AT DATE mm:dd
Message 5:	OUT OF OFFICE RETURN UNKNOWN
Message 6:	CALL (enter up to 17 digits)
Message 7:	IN OFFICE STA xxxx
Message 8:	IN MEETING RETURN AT TIME hh:mm
Message 9:	AT HOME
Message 0:	AT BRANCH OFFICE
*	User Custom Message
#	Deactive

In iPECS-LIK

To activate Custom or Pre-defined Message Forward:

- Lift the handset,
- Press TRANS/PGM,
- Dial User Program feature code 51,
- Dial the two-digit text Message code (00-20),
- Dial any auxiliary input for messages 01-04 and 06-08,
- Press HOLD/SAVE, forward confirmed.

To cancel activated Message:

- Press TRANS/PGM,
- Dial User Program feature code 51,
- Dial #.
- Press HOLD/SAVE

To program the Station Custom Message (00) at your station:

- Press TRANS/PGM,
- Dial User Program feature code 52,
- Enter Message contents, up to 24 characters, using the following Character Entry Chart,

Q – 11 Z – 12 . – 13 1 – 10	A - 21 B - 22 C - 23 2 - 20	D - 31 E - 32 F - 33 3 - 30
G – 41 H - 42 I - 43 4 - 40	J - 51 K - 52 L - 53 5 - 50	M - 61 N - 62 O - 63 6 - 60
P - 71 R - 72 S - 73 Q - 7* 7 - 70	T - 81 U - 82 V - 83 8 - 80	W - 91 X - 92 Y - 93 Z - 9# 9 - 90
*1 - Blank *2 - : *3 - ,	0-00	#

Character Entry Chart

- Press HOLD/SAVE, message saved.

In iPECS-MG

To activate Custom or Pre-Defined Message Forward:

- Press TRANS/PGM,
- Dial User Program feature code 41,
- Dial the one-digit text Message code (0-9),
- Dial any auxiliary input for messages 1-4 and 6-8,
- Press HOLD/SAVE, forward confirmed.

To cancel activated Message:

- Press the Fwd Soft button,
- Press FWD button or dial 554,
- Dial #.

To program the Station Custom Message (00) at your station:

- Press TRANS/PGM,
- Dial User Program feature code 42,
- Enter Message contents, up to 24 characters, using the following Character Entry Chart:

Dial Pad button	Letter Type								
	Uppercase (ABC)				Lowercase (ABC)				Num
	Button depressions								
	1	2	3	4	1	2	3	4	1
1	@	:	/	<	@	:	/	<	1
2	A	B	C		a	b	c		2
3	D	E	F		d	e	f		3
4	G	H	I		g	h	i		4
5	J	K	L		j	k	l		5
6	M	N	O		m	n	o		6
7	P	Q	R	S	p	q	r	s	7
8	T	U	V		t	u	v		8
9	W	X	Y	Z	w	x	y	z	9
0	.	,	?	!	.	,	?	!	0
*	*				*				*
#	#				#				#

Character Entry Chart

- Press HOLD/SAVE, to save the message.

3. Placing Calls

3.1 Internal Calls

You can place calls to other stations in the system over the Intercom. The call will ring, or for an **ICM Voice Announce** call, a splash tone will be heard. Ring or Voice Announce is normally determined by settings at the called station but you may change this by dialing '#' after placing the call. By changing the mode, a Voice Announce call will ring or a ringing ICM call will allow Voice Announce (toggle).

You can assign a Flex button for **Direct Station Selection/Busy Lamp Field (DSS/BLF)**. The DSS/BLF button allows you to call another station with a single tuch of the button. The button LED will display the other station's status (ON=busy, OFF=idle).

When you go off-hook, you may connect to another station or system resource automatically. This **Prime Line Preference** may be immediate or delayed allowing you to take other actions during the delay. Otherwise, you may press another Flex button before going off-hook to override Prime Line Preference.

If you go off-hook and take no action, Intercom dial-tone will time-out, and after the **Howler tone** is received, your phone will be placed out-of-service in **Intercom Lock-Out**; you then must hang-up to return the phone to an idle state.

To place an Intercom call:

- Lift the handset,
- Dial the Intercom number of the desired station,
- When the call is answered or the Splash tone is heard, speak to the called party.

3.1.1 Using Camp-On when calling a busy station

If the called party is busy, you may activate **Camp-On**, **Callback** or **Voice Over** at the station. **Camp-On** allows you to wait off-hook for the called station to answer. **Callback** allows you to hang-up, and when the busy station returns to an idle state, the system will call your Station; after you answer the callback, the system will call the previously busy station.

If you are the Attendant or Secretary, you may activate **Intrusion**. You may also use **Step Call**; dial the next station by dialing just the last digit of the Intercom number.

To Camp-On (wait off-hook) for a busy station:

- While placing a call to a busy station, dial * and wait for an answer.

To Callback (wait on-hook) for a busy station:

- While placing a call to a busy station, press the CALL BACK button and hang-up.

To make a Voice Over announcement to a busy station:

- Dial #, and after the Splash tone is heard, begin speaking.

3.1.2 To leave a Message Wait

If the called user does not answer or is in DND mode, you may leave a **Message Wait**. The called user will receive a Message Wait indication; the MSG LED will flash.

To activate Message Waiting:

- Press the CALL BACK button and hang-up.

3.2 External Calls

3.2.1 Placing external CO/VoIP calls

External calls are placed on CO/IP lines. These 'lines' are accessed either using a button on the iPECS Phone assigned as a **CO/IP line** or using dial codes. The CO/IP lines are grouped for different types of calls, local, long distance, etc. Using the **CO/IP line group** code, you will be able to access any line from the group. A Flex button on the iPECS Phone assigned as a LOOP button lets you access a line from a group. Dial codes for access to CO/IP lines are:

Individual CO/IP line access

88 + Line number (01-10 for iPECS SBG-1000, 01-42 for iPECS-50 & 100, 001-200 for iPECS-300, 001-400 for iPECS-600, or 001-600 for iPECS-1200).

or

88 + Line number (01-80 for iPECS-MG100, or 001-240 for iPECS-MG300).

CO/IP Group access

801-805 for iPECS SBG-1000, 801-820 for iPECS- 50 & 100, 801-872 for iPECS-300 & 600, or 8900`-89100 for iPECS-1200

or

801-824 for iPECS-MG100, or 801-872 for iPECS-MG300

Any CO/IP Line access

9

When dialing on a CO line, which uses pulse style signals, you may activate **Dial Pulse to Tone Switchover** changing to DTMF style dialing for banking services, etc.

When placing an IP call, you must dial an IP address using the '*' key in place of the dot.

If **Least Cost Routing** is set-up, the number you dial will be analyzed and the system will place the call on the least expensive route.

You may be assigned **Dialing** and/or **CO/IP Line Access Restrictions**, in which case you will receive error tone if you attempt to dial or access a restricted number/CO/IP line. **CO/IP line** and **Station Class Of Service (COS)**, which establish dialing restrictions, may vary during Day and Night operation (**Day/Night COS**).

You may need to enter an ***Authorization code*** before placing calls, in which case you will receive a second dial tone.

Your external calls may be subject to **Call Time Restrictions**, you will receive a **Call Warning Tone** prior to disconnect.

NOTE—In the event of an emergency, assigned Emergency numbers (ex., a 911 call) may be dialed from any station in the System, regardless of a Station's dialing restrictions (COS).

To place an external call:

- Lift the handset,
- Select/dial the CO/IP line/group,
- Dial the desired number.

3.2.2 Waiting for the next available CO/IP line

If all the lines connected to your system are busy, you will receive an All Trunks Busy signal. You may request to be notified when a line becomes free.

To activate a queue if the selected/dialed line is busy:

- Select/dial a busy CO/IP line,
- Press the CALL BACK button,
- Return to an idle state by going on-hook; when the line becomes available, the Station will be notified with ringing.

3.2.3 Account Codes: Tracking External calls for billing

In some cases, you or your company may desire to track calls for billing or other purposes. When an **Account Code** is entered, it is output from the system to a printer in the **SMDR** report. An **Account Code** Flex button can be programmed (refer to *Assigning features to Flex buttons*).

In iPECS-LIK

To enter an Account Code before the call:

- Lift the handset,
- Press the assigned ACCOUNT CODE button,
- Dial the Account Code (1-12 digits),
- Press *, Intercom dial tone is heard,
- Place the CO/IP call as normal.

To enter an Account Code during a call:

- Press the assigned ACCOUNT CODE button,
- Dial the Account Code (1-12 digits),
- Press *.

In iPECS-MG

To enter an Account Code before the call:

- Lift the handset,
- Dial 550,
- Dial the Account Code (1-12 digits),
- Press *, Intercom dial tone is heard,
- Place the CO/IP call as normal.

3.2.4 To disable dialing from your phone

You can temporarily 'Lock' your phone by activating **Temporary COS**, which will disable dialing outside calls from the phone. To deactivate **Temporary COS** you must enter the Station's Authorization code.

To activate Temporary COS:

- Press TRANS/PGM,
- Dial 21(iPECS-LIK)/31(iPECS-MG) (User Program code),
- Dial your Authorization code(iPECS-MG),
- Press HOLD/SAVE.

To deactivate Temporary COS:

- Press TRANS/PGM,
- Dial 22(iPECS-LIK)/32(iPECS-MG) (User Program code),
- Dial your Authorization code,
- Press HOLD/SAVE.

3.2.5 To temporarily override dialing restrictions at a phone

Override the dialing restrictions at any phone by activating **Walking COS**. The **Walking COS** dialing restriction levels are applied for a single call only. For multiple calls, you will need to reactivate **Walking COS** or use the FLASH button to regain CO/IP dial-tone.

To activate Walking COS:

- Press TRANS/PGM,
- Dial 23(iPECS-LIK)/33(iPECS-MG) (User Program code),
- Dial your Authorization Code (Station number and password),
- Dial '*' (iPECS-MG),
- Place call as normal.

3.3 Using Automated Dialing

3.3.1 Using Last Number Redial (LNR)

The last number dialed on an external call is automatically saved in the **Last Number Redial (LNR)** buffer.

In iPECS-LIK, iPECS SBG-1000

To dial the Last Number for an external call:

- Lift the handset,
- Press SPEED,
- Dial *,
- Press the Vol Up/Vol Down to select the desired number,
- Press HOLD/SAVE.

In iPECS-MG

To dial the Last Number for an external call:

- Lift the handset,
- Press SPEED,
- Dial *.

3.3.2 Using and Entering Saved Number Dial

You may store the last number dialed on an external call to the **Saved Number Dial** buffer for convenient dialing at a later time. The Saved number is stored until a new number is saved.

To place a call using Saved Number Dial:

- Lift the handset,
- Press SPEED.
- Dial #

To store a number in the Saved Number Dial:

- While on an outgoing external call, press SPEED twice.

3.3.3 Using System Speed Dial Numbers

The iPECS SBG-1000 & 50 & 100 systems each have memory allocated for 800 **System Speed Dial** numbers (bins 200-999). The iPECS-300 system has memory allocated for 3000 **System Speed Dial** numbers (bins

2000-4999). The iPECS-600 system has memory allocated for 6000 **System Speed Dial** numbers (bins 2000-7999). The iPECS-1200 system has memory allocated for 12000 **System Speed Dial** numbers (bins 20000-31999). The iPECS-MG100 system has memory allocated for 1000 **System Speed Dial** numbers (bins 2000-2999). The iPECS-MG300 system has memory allocated for 2000 **System Speed Dial** numbers (bins 2000-3999).

You may, if allowed, use **System Speed Dial** to call frequently dialed numbers.

In some cases, these numbers are divided into groups called **System Speed Zone Groups**. In this case, you may access some numbers and not others and your dialing restrictions may be invoked.

Only an Attendant can assign **System Speed Dial** numbers.

To place a call using System Speed Dial:

- Lift the handset,
- Press SPEED,
- Dial the desired System Speed Dial bin number (200-999 for iPECS SBG-1000 & 50 & 100, 2000-4999 for iPECS-300, 2000-7999 for iPECS-600, 20000-31999 for iPECS-12000, 2000-2999 for iPECs-MG100 , or 2000-3999 for iPECS-

3.3.4 Using and Entering Station Speed Dial Numbers

Each station in the iPECS SBG-1000 & 50 & 100 System is allocated memory for 20 **Station Speed Dial** numbers (bins 00-19) each up to 23 digits. The iPECS-300 & 600 & 1200 each support 100 **Station Speed Dial** numbers (bins 000-099). The iPECS-MG 100 & 300 each support 50 **Station Speed Dial** numbers (bins 000-049). These numbers are entered at the user's station and may include several 'special' instructions. Special instructions and the corresponding button are:

PAUSE will momentarily stop dialing.

FLASH as 1st digit—Activate dial tone detect.

FLASH not as 1st digit—The system will generate a ***flash on the CO line***.

CALL BACK as 1st digit—Send digits as ***ISDN Keypad Facility message***.

'*' as 1st digit—**Display Security,** the stored number will not be displayed when used.

'*****' not as 1st digit—**Dial Pulse to Tone Switchover**, the system will switch from pulse to tone dialing.

When entering a **Speed Dial**, a 16 character name may be associated with the number for ***Dial by Name***.

To place a call using Station Speed Dial:

- Lift the handset,
- Press SPEED,
- Dial the desired Station Speed Dial bin number (00-19 or 000-099 or 000-049).

To enter a Station Speed Dial number with CO Line and Name:

- Press TRANS/PGM,
- Press SPEED,
- Dial the desired Station Speed Dial bin number,
- Select/dial the CO/IP line/group, (Skip this step in iPECS SBG-1000)
- Dial the desired number to be stored,
- Press HOLD/SAVE,
- Enter the associated name, if desired,
- Press HOLD/SAVE.

4. Call Handling

4.1 Call Transfer: Sending a call to a different destination

You can send an active call to another station or other resource of the system, using **Call Transfer**. You can screen the transfer with the receiving party (**Screened Call Transfer**) or complete the transfer without screening (**Unscreened Call Transfer**).
Transferred calls, internal or external, are placed in **Transfer Hold**. These calls will receive Music on Hold (***MOH***) and will recall if not answered in a timely manner.
If an **Unscreened Transfer** call encounters an error or DND, it may immediately recall at your Station.
DSS/BLF buttons may be used to transfer calls.

To Transfer an active call:

- Press TRANS/PGM,
- Call the transfer party,
- Unscreened Call Transfer - Hang-up,
  OR
- Screened Call Transfer - When call is answered or Splash tone is heard, announce the call and then hang-up.

4.2 Call Hold: Placing a call in a waiting state

You may place an active Internal or External call in one of several holding states. In System Hold, other non-restricted stations may pick-up the call. In Exclusive Hold, only the holding station may pick-up the call.
The system is assigned a preferred hold type (System or Exclusive). You may override this **Hold Preference** by pressing the HOLD/SAVE button twice.
The LEDs for CO/IP line buttons flash at distinctive rates for the holding station and other iPECS Phone users.
There are also user operations such as pressing a DSS/BLF button that will place a call in **Automatic Hold**.
Calls will remain in the held state for a period and then recall the user. This **Hold Recall** is provided with a different ring signal. If not answered in a timely manner, the Attendant will receive **Attendant Hold Recall**.

To place a call on Hold:

- Press HOLD/SAVE.

4.3 Broker Call: Switching between two calls

You may switch between the active call and a call on ***Hold***, placing the active call on Hold acting as a broker between two or more parties, **Broker Call**. iPECS Phone users may 'broker' for multiple calls up to the number of **CO/IP line** buttons.

To switch between two calls, Broker Call:

- Press the desired **CO/IP line** button.

4.4 Joining multiple people in a Conference

You can establish a **Conference** with up to 3 parties(iPECS-LIK)/13 parties(iPECS-MG), or 32 parties when using a Multi-Party Conference Interface Module (MCIM)(iPECS-LIK). The other parties in the **Conference** may be internal or external.
A **Conference** can be placed on Hold and is subject to *Hold Recall*.
You may also use the Conference operation to join 2 external parties in a private conversation. This is an **Unsupervised Conference**, which is not subject to the normal Hold Recall operation.
A CONF button is required.

To establish a Conference:

- Establish call with one of the desired conference parties,
- Press CONF.
- Establish call with the other conference party,
- Press CONF.
- Repeat to add additional parties to the conference
- Press CONF.

To place a Conference on Hold:

- Press the HOLD/SAVE button.

To retrieve the Conference from Hold:

- Press the CONF button.

To establish an Unsupervised Conference:

- Establish conference with two external parties,
- Press the CONF button.
- Hand-up handset.
-

To retrieve an Unsupervised Conference:

- Lift the handset,
- Press the CONF button

4.4.1 Setting up a Conference Room

In addition to establishing a Conference, up to 9 **Conference Rooms** can be set up, letting up to 32 parties converse when using a MCIM. When setting up a Conference Room, a password can be designated for invited parties (internal and external parties) to use for accessing the established Conference Room.

In iPECS-LIK

To set-up a Conference Room:

- Press the TRANS/PGM button,
- Dial 53 to create a Conference Room,
- Dial the desired Conference Room number (1-9),
- If desired enter a password for the Conference Room (up to 12 digits),
- Press HOLD/SAVE to establish the Room.

To join a Conference Room:

- Press the TRANS/PGM button,
- Dial 59 (Conference Room entry code),
- Dial the Conference Room Number,
- Dial the Conference Room password.

To delete a Conference Room:

- Press the TRANS/PGM button,
- Dial 54 (delete Conference Room code),
- Dial the Conference Room number (1-9),
- Dial the Conference Room password,
- Press HOLD/SAVE to delete the Conference Room.

In iPECS-MG

To set-up a Conference Room:

- Press the TRANS/PGM button,
- Dial 54 to create a Conference Room,
- Dial the desired Conference Room number (571-579),
- If desired enter a password for the Conference Room (up to 12 digits),
- Press HOLD/SAVE to establish the Room.

To join a Conference Room:

- Lift the handset,
- Dial 571-579 (Conference Room entry code),
- Dial the Conference Room password.

To delete a Conference Room:

- Press the TRANS/PGM button,
- Dial 55 (Conference Room delete code),
- Dial the Conference Room number (571-579),
- Dial the Conference Room password,
- Press HOLD/SAVE to delete the Conference Room.

4.5 Call Park: Placing a call on hold to Page

A user may transfer an active CO/IP call to a special holding location (Park Orbit), which can be accessed easily from any station in the system. Typically, this feature is used with *Paging* to notify the desired User of **Call Park**.

Parked calls are subject to *Hold Recall* after the **Call Park** timer.

In iPECS-LIK

To park an active external call:

- Press TRANS/PGM,
- Dial the Park Orbit code (601-610 for iPECS SBG-1000 & Micro & 50 & 100, 601-619 for iPECS-300 & 600 or 601-800 for iPECS-1200),
- Return to idle.

To retrieve a parked call:

- Lift the handset,
- Dial the Park Orbit code (601-610 for iPECS SBG-1000 & Micro & 50 & 100, 601-619 for iPECS-300 & 600 or 601-800 for iPECS-1200).

In iPECS-MG

To park an active external call:

- Press TRANS/PGM,
- Dial the Park Orbit (541),
- Dial the Park number (00-49)
- Return to idle.

To retrieve a parked call:

- Lift the handset,
- Dial the Park Orbit (541),
- Dial the Park number (00-49)

5. Retrieving & Responding to Messages

5.1 Responding to a Station Message Waiting Indication

Another station can leave a Station **Message Waiting** indication when you do not answer or your phone is in *DND*. A flashing CALL BACK LED on the iPECS Phone indicates a Message Waiting. As a further notification, a **Message Wait Reminder Tone** can be provided. You may respond with a call back.

To respond to your Station messages:

- Press CALL BACK to return message.

5.2 Getting Voice Mail Messages

When callers are forwarded or recall to your Voice Mail Box, they can leave a voice message. Your Voice Mail Box is part of the integrated **Voice Mail** module, the **iPECS Feature Server** or an external Voice Mail system.

These Voice Mail systems allow access to and management of the received voice messages. While in your Mail Box, you have control of your password and Mail Box greeting. In addition, you can remotely control Call Forward for your station to Voice Mail. You will need to register an *Authorization Code* for your station to access VMIM/VSF Voice messages.

To retrieve Voice Mail locally:

- Press CALL BACK,
- After the prompt enter your station number and password,
- Dial desired option codes,
- At completion of session, hang-up to return to idle.

To access Voice Mail Box from a Remote Location:

- Lift the handset,
- Dial the telephone number of a *DISA* CO line assigned for answer by the Auto Attendant,
- Upon answer,
- dial # to receive the 'Mail Box & Password' prompt(iPECS-LIK & SBG)
- Or
- dial 523 (VMIB Access Code)(iPECS-MG),
- Dial the Mail Box and password to receive the 'Number of Messages' prompt,
- Dial desired option codes,
- At completion of session, hang-up.

6. Remote System Access

6.1 Direct Inward System Access (DISA)

DISA (Direct Inward System Access) allows remote users to gain access to the system's resources (remote users may be required to enter an ***Authorization Code***). The system will recognize remote user dialed inputs (call other stations, place calls over CO/IP lines, review voice mails, etc). The iPECS SBG-1000 system does not support normal DISA service, but supports call to the station and remote voice mail access when answering by a VSF auto attendant.

In iPECS SBG-1000

To call to the station remotely:

- Call the telephone number of a CO line assigned for answer by a VSF auto attendant,
- Upon answer, dial station number.

In iPECS-LIK, iPECS-MG

To access system resources remotely:

- Call the system's DISA facility,
- Await an answer and dial your authorization code (station number and password),
- Dial "*" for end mark (iPECS-MG),
- Dial as needed for the desired system resource.

6.2 Mobile Phone Extension

When away from your desk or office you can place and receive calls on a registered mobile phone. Calls to your iPECS Phone will ring your Mobile Phone and you can place calls using the resources of the iPECS. You may need to activate the Mobile Phone Extension feature and assign the Mobile Phone number.
This feature is activated through an ISDN/VOIP CO line.

NOTE—The mobile extension may reconnect to the transfer by pressing the # key.

In iPECS-LIK, iPECS SBG-1000

To register a mobile phone number: (iPECS-LIK)

- Press the TRANS/PGM button,
- Dial 37.
- Dial the mobile phone number.
- Press the HOLD/SAVE button.

To activate a registered mobile phone: (iPECS-LIK)

- Press the TRANS/PGM button.
- Dial 38.
- 1 to activate, 0 to deactivate,
- Press the HOLD/SAVE button.

To place a call from the mobile extension using the iPECS:

- Dial the ISDN DID number of the station, the system will check the Caller ID, answer the call and the user will receive intercom dial tone,
- Place internal or external iPECS calls as normal.

To Transfer a call from the mobile extension using the iPECS:

- Dial * while on an iPECS call,
- Dial the desired extension, the call is transferred and the mobile phone returns to idle.

In iPECS-MG

To register a mobile phone number:

- Press the TRANS/PGM button,
- Dial 51,
- Select Mobile Index 1 or 2,
- 1 to activate, 0 to deactivate,
- Press the HOLD/SAVE button.

To activate a registered mobile phone from the user's station:

- Press the TRANS/PGM button,
- Dial 52,
- Select Mobile Index 1 or 2,
- Dial the mobile phone number with CO Access code,
- Press the HOLD/SAVE button.

To place a call from the mobile extension using the iPECS System:

- Dial the ISDN DID number of the station; the system will check the Caller ID and answer the call. The user then will receive intercom dial tone,
- Place internal or external iPECS call as normal.

To Transfer a call from the mobile extension using the iPECS:

- Dial the mobile flash digit "*" while on an iPECS call,
- Dial the desired extension, the call is transferred and the mobile phone returns to idle.

NOTE—The mobile extension may reconnect to the transfer call by pressing the mobile flash digit(*).

7. Misc. Features

7.1 Background Music and Music on Hold (iPECS-LIK)

Two audio sources can be connected to the system. These sources or an internal source provide input for Background Music (BGM) and Music On Hold (MOH). In addition, a recorded message from the VMIM can be used. BGM is played over the speakers of the iPECS Phone when the station is idle. MOH is played to callers placed on ***Hold***.

There are eleven possible selections for BGM and MOH:

00: Off

01: Source BGM1

02: Source BGM2

03: VSF MOH 1

04: SLT MOH 1

05: SLT MOH 2

06: SLT MOH 3

07: SLT MOH 4

08: SLT MOH 5

09: VSF MOH 2

10: VSF MOH 3

To turn on Background Music:

- Press HOLD/SAVE to cycle through the BGM selections.

7.2 Using Internal, External and Meet-Me Paging

The User can broadcast announcements to other stations and/or external speakers. Stations are assigned to one or more of the **Internal Page Zones**. The system has two **External Page Zones** that can be connected to external speakers.

In iPECS-LIK, Page Zone codes are:

Internal Page Zones 501-510 (iPECS SBG-1000 & 50 & 100), 501-535 (iPECS-300 & 600), 301-400 (iPECS-1200)

Internal All Call Page 543

External Page Zones 545-546
External All Call Page 548
All Call Page 549

In iPECS-MG, Page Zone codes are:
Internal Page Zones :
543 + Zone No(01~15) (iPECS-MG100)
543 + Zone No(01~30) (iPECS-MG300)
Internal All Call Page 543 + 00
External Page Zones 548
All Call Page 549

If the desired Page Zone is busy, the User can elect to be recalled when their turn comes in the queue. Users can also request a paged party answer the Page using **Meet-Me Paging**. In this case, the paged party may answer the page from any phone in the system by dialing the Meet-Me code.

To make a page:

- Lift the handset,
- Dial the desired Page zone,
- If assigned, after page warning tone, make announcement.

To queue for a page when busy is received(iPECS-LIK & SBG):

- Press CALL BACK,
- Replace the handset returning to idle.

To answer a Meet-me-Page:

- Lift the handset.
- Dial **544**(iPECS-LIK)/511(iPECS SBG-1000)/546(iPECS-MG) (Meet-Me-Page code)**.**

7.3 Push-To-Talk (PTT) Page

iPECS Phones can be assigned as a member of one or more of the system's nine Push-To-Talk (PTT) page groups. Users separately log-in or log-out of any one or all PTT groups to which the phone is assigned. Once logged in, place or receive one-way page announcements to/from other users who are logged in to the same PTT group.

To log-in to a PTT group:

- Dial #0(iPECS-LIK)/538(iPECS-MG), the PTT Log-in/out code.
- Dial the desired PTT group number (1-9 or 0 for all groups).

To log-out of the PTT group(s):

- Dial #0(iPECS-LIK)/538(iPECS-MG), the PTT Log-in/out code.
- Press the * key.

To place a page to the active PTT group:

- Press and hold the PTT button.
- After confirmation tone make page announcement.

7.4 Wake-Up Alarm

iPECS supports an Alarm Clock for each station. You can set the alarm clock to repeat daily or as a one-time alarm.
When responding to the alarm by lifting the handset, BGM or Wake-Up Alarm announcement (iPECS-LIK, iPECS SBG-1000) will be provided.

To set the Wake Up Alarm clock:

- Press TRANS/PGM,
- Dial **41**(iPECS-LIK)**/21**(iPECS SBG-1000)/**13**(iPECS-MG) (Alarm Clock code).
- Dial hh/mm for time alarm should alert,
- Press # to have the alarm repeat daily,
- Press HOLD/SAVE.

To erase Wake-Up:

- Press TRANS/PGM,
- Dial **42**(iPECS-LIK)**/ 22**(iPECS SBG-1000)/**14**(iPECS-MG) (Alarm Clock delete code)
- Press HOLD/SAVE.

7.5 Alarm/Door Bell

The system can monitor external **Alarm** or **Door Bell** contacts:

Alarm Monitor—should the external contact activate, a unique Alarm Ring signal and LCD display may be received. To restart the monitor circuit, the external contacts must be deactivated and the Alarm Ring signal terminated.

Door Bell—a unique Door Bell Ring (single tone burst) may be received each time the external contact is activated. A system contact also can be assigned to act as a **Door Open** contact.

To terminate the Alarm signal:

- Dial 565(iPECS-LIK & MG)/65(iPECS SBG-1000) (Alarm Stop code).

To activate the Door Open contacts:

- Lift the handset,
- Dial #* (Door Open code) and contact number 1 to 4.

NOTE—Contacts 3 & 4 are only available in the iPECS -300 & 600. Contacts 1 is available in the iPECS -MG.

7.6 Power Fail Transfer

When AC power to the system fails, back-up operation may be provided with back-up batteries or **Power Fail Transfer (PFT)**. When battery back-up is provided the station will operate normally. When **PFT** is implemented, an SLT is connected to a CO line by the system. This SLT can be used as any normal SLT, providing service while power is out.

7.7 System Voice Memo

The integrated Voice Mail modules incorporate several **Voice Memos** to provide Station Users with general information such as station number, date, time, and feature status. Voice Memos can be heard over the speaker or handset of the iPECS Phone and over the handset for SLTs.

For the **Station Status Memo**, the following items are reported:

ICM Signaling Mode (Handsfree/Tone/Privacy)
Station IP Address
Station Mac Address
Number of messages x (x: number of all message waiting)
Wake-Up Time (hh:mm)
Do Not Disturb
Forwarded to station xxx
Forwarded to speed bin xxx
Queued CO/IP line xxx
Locked (Temporary COS)
COS x

NOTE—Only activated features are announced.

To hear Date & Time memo:

- Dial the Voice Memo code (661 for iPECS-50 & 100, or *661 for iPECS-300 & 600 & 1200, or 675+1 for iPECS-MG),
- Date and Time memo is heard, “Date is May 2nd.Time is xx:xx pm”.

To hear Station Number Prompt:

- Dial Voice Memo code (662 for iPECS-50 & 100, or *662 for iPECS-300 & 600 & 1200, or 675+2 for iPECS-MG),
- The Station Number memo is heard, “This is station 150”.

To hear Station Settings:

- Dial Voice Memo code (663 for iPECS-50 & 100, or *663 for iPECS-300 & 600 & 1200, or 675+3 for iPECS-MG),
- Station Status Memo is heard.

7.8 Contrast (iPECS-LIK)

The Phone LCD brightness can be adjusted to your preference.

To change the Phone LCD Contrast:

- While the phone is idle, press the VOL ▲▼ buttons.
- VOL ▲ will increase darkness.
- VOL ▼ will decrease dark (brightness).

7.9 Network Config.

The user can review the current network configuration or modify a new phone network configuration.

To access Network Config. Settings:

- Press TRANS/PGM button and Dial 78(iPECS-LIK)/38(iPECS SBG-1000)/80(iPECS-MG),
- Enter the password (default=147*), the following will display:

  - MFIM #[1/2] ?
  - MFIM #1 – CHANGE[#]

- Press the # key to toggle between multiple profiles (MFIM),
- Press the VOL ▲ VOL ▼ buttons to advance to the next network configuration item,
- Press the HOLD/SAVE button to save each setting.

To set default Config settings:

- In Network Config. Menu, use the VOL ▲ VOL ▼ buttons to locate the Default Config Screen (shown),
  Set default – [*]
- Press the * key.

To exit Config. Settings:

- Press SPEAKER,
- Press the * key to exit,
  OR
- Press the # key to Reset/Reboot the phone with new settings.

8. PBX, Centrex & ISDN

8.1 Access PBX or Centrex

The iPECS has been designed to operate with a host PBX system or Centrex services from your service provider. The iPECS connects to a host with analog CO lines.

When accessing a CO line, the phone will act as an extension of the host, allowing access to the host system features using the host dial codes. While on a call, use the iPECS **Flash** feature to transfer calls to other host extensions or access features of the host.

The Flash feature may be used on other CO lines to regain dial tone from the CO line without relinquishing control of the CO line to place another call.

To access PBX or Centrex features while idle:

- Lift the handset,
- Select/dial access a PBX/Centrex CO line,
- Dial PBX/Centrex feature code.

To access PBX/Centrex features while on a PBX/Centrex CO line:

- Press the FLASH button
- After receiving new dial tone, dial PBX/Centrex feature code.

8.2 Access the ISDN Network

8.2.1 Using the Keypad facility to access ISDN features

Access to certain features of your ISDN services requires that dialed digits be sent to the ISDN as data and not tones. In this case, dialed digits are sent as 'Keypad messages'.

A Keypad Facility button must be assigned using the ***Flex Button program*** procedures. Once active, dial into the ISDN for services; however, actions other than dialing will deactivate the Keypad Facility operation.

To activate Keypad Facility operation:

- Press the KEYPAD FACILITY button to switch to keypad mode,
- Dial as desired.

To deactivate Keypad Facility operation:

- Press KEYPAD FACILITY,
- OR
- Press a Feature or Flex button.

8.2.2 Activating ISDN Caller ID restriction

iPECS Phone users can restrict the transmission of Caller ID to the receiving phone (may be a subscription service of your carrier). Separate Flex buttons are required to activate incoming, Connected Line (COL), and outgoing, Calling Line ID (CLID) restriction.

To restrict Caller ID:

- Lift the handset,
- Press the CLIR/COLR button and place the call.

9. Set Features & Flex Buttons

9.1 Entering Station Program Data

A special code set is available for iPECS Phone users to assign certain attributes such as Authorization Codes (Passwords). After entering the **User Program** mode, dial the codes to select the attribute and setting. Once selected, the setting is saved. A list of the User Program codes, the feature/function and any input required are given in *Appendix B*.

To assign User Programmable station attributes:

- Press TRANS/PGM,
- Dial desired User Program codes shown in *Appendix B*,
- Press HOLD/SAVE.

9.2 Assigning Features to Flex Buttons

You may assign features and functions to the Flex buttons on your iPECS Phone. If allowed, you may even assign CO/IP lines to the Flex buttons.

Flex buttons may be assigned for most features providing **One-Touch** feature activation (e.g., a Flex button may be assigned to access the ***Account Code*** feature and may include the Account code digits, as a one-touch account code button).

Features that may be assigned to a Flex button include:

DSS/BLF—Enter station number.

Speed Dial—Enter Station/System Speed dial bin number.

Flex Numbering Plan—Enter Flex Numbering Plan code (refer to ***Appendix A***).

User Program Code—Press TRANS/PGM and enter a User Program code (refer to ***Appendix B***).

CO/IP Line—Enter the CO/IP line or group number.

To assign a feature to a Flex button:

- Press TRANS/PGM,
- Press the desired Flex button,
- Dial desired code and required inputs. For User Program codes, first press the TRANS/PGM,
- Press HOLD/SAVE.

9.3 Network configuration

You many review the current network configuration or modify a new phone network configuration.

To access Network settings:

- Press TRANS/PGM button and dial 78(iPECS-LIK)/38(iPECS SBG-1000)/80(iPECS-MG),
- Enter the password (default=147*); the following will display:
  - MFIM #[1/2] ?
  - MFIM #1 - CHANGE[#]
- Press the # key to toggle between multiple profiles (MFIM),
- Press the VOL ▲▼ buttons to advance to the next network configuration item,
- Press the HOLD/SAVE button to save each setting.

To set LLDP:

- In Network Config. Menu, use VOL ▲▼ buttons to locate the 802.1x configuration screen (shown),

  - LLDP?
  - [ENABLED] – CHANGE [#]

- Enable in LLDP? menu and press the **Hold/Save** button.

To configure 802.1x:

- In Network Config. Menu, use VOL ▲▼ buttons to locate the 802.1x configuration screen (shown),

  - 802.1x ?
  - [ENABLED] – CHANGE[#]
  -

- Enable in 802.1x menu and press the **Hold/Save** button.
- Enter ID in **802.1x USER ID** menu (It appears when 802.1x is enabled.) and press the **Hold/Save** button.
- Enter Password in **802.1x PASSWORD** menu (It appears when 802.1x is enabled.) and press the **Hold/Save** button.

To set default Config. settings:

- In Network Config. Menu, use VOL ▲▼ buttons to locate the Default Config. Screen (shown),

  - SET DEFAULT CONFIG(DOT:*)
  -
  -

- Press the * key.

To exit Config. settings:

- Press the SPEAKER button,
- Press the * key to exit,
  OR
- Press the # key to Reset/Reboot the phone with new setting.

Appendix A Flexible Numbering Plan

In iPECS-LIK, iPECS SBG-1000

Feature	iPECS -50	iPECS -100	iPECS -300	iPECS -600	iPECS -1200	iPECS SBG-1000
Intercom Call	100 - 149	100 - 169	100 - 399	1000 - 1599	1000 - 2199	10-33
CO/IP Group Access	801 – 820	801 - 820	801 - 872	801 - 872	89001 - 89200	801 - 805
Individual CO/IP Line Access	8801 – 8842	8801 – 8842	88001 – 88200	88001 – 88400	88001 – 88600	8801 – 8810
Group Pilot Number	620 – 659	620 - 659	620 - 667	620 - 667	401 - 500	620 – 631
Internal Page Zone	501 - 510	501 - 510	501 - 535	501 - 535	301 - 400	501- 510
Call Parking Locations	601 – 610	601- 610	601 - 619	601 - 619	601 - 800	601 – 610
Station User VMIM/VSF Features	66	66	*66	*66	*66	
Door Open	#*1	#*1 - #*2	#*1 - #*4	#*1 - #*4	#*1 - #*4	#*

Feature	iPECS-LIK	iPECS SBG-1000	Remark
Internal All Call Page	543		
Meet Me Page	544	511	
External Page Zone 1-2	545 - 546		
External All Call Page	548		
All Call Page (Internal/External)	549	500	
SMDR Account Code Enter	550		SLT use only
Flash Command to CO Line	551		SLT use only
Last Number Redial	552	52	SLT use only
DND	553	53	SLT use only; Toggle ON/OFF
Call Forward	554	54	

Feature	iPECS-LIK	iPECS SBG-1000	Remark
Speed Dial Programming	555	55	SLT use only
Message Wait/Callback Enable	556	56	SLT use only
Message Wait/Callback Return	557	57	SLT use only
Speed Dial Access	558	58	SLT use only
Cancel DND/FWD	559	59	SLT use only
CO System Hold	560	67	SLT use only
Program Mode Access	561		SLT use only
Attendant Unavailable	562		
Alarm Reset	565	65	
Group Call Pickup	566	**	
Universal Answer	567		
Account Code with bin	568		
Walking COS Code	569		
ACD Supervisor On/Off Duty	571		
ACD Supervisor Login	572		
ACD Supervisor Logout	573		
ACD Help Code	574		
ACD Calls In Queue Display	575		
ACD Supervisor Status Display	576		
ACD Supervisor Monitor	577		
ACD Reroute Queued Call w/answer	578		
ACD Reroute Queued Call w/o answer	579		
Enter Conference Room	59		
Camp-On Answer	600	66	SLT use only
Call Coverage button	67	*#	
Direct Call Pickup	7	7	
Retrieve Last Held CO/IP	8*	8*	
Retrieve Individual Held CO/IP	8#	8#	
Access CO Line in the 1st Available CO Group	9	9	

Feature	iPECS-LIK	iPECS SBG-1000	Remark
Attendant Call	0	0	
VM Message Wait Enabled	*8		
VM Message Wait Disable	*9		
MCID Request	*0		
Unsupervised Conference extend code	##		
PTT Group Login/Logout	#0		

In iPECS-MG

1) Basic Number

No	Name	Code	Remark
1	Station Number	100 ~ 4xx	
2	CO Group Access Code	9, 801 ~ 872(MG-300) 801 ~ 824(MG-100)	
3	Station Group Number	620 ~ 669(MG-300) 620 ~ 639(MG-100)	

2) Feature Code

No	Feature Name	Code	Remark
1	Attendant Call	0	
2	Conference Room 1	571	
3	Conference Room 2	572	
4	Conference Room 3	573	
5	Conference Room 4	574	
6	Conference Room 5	575	
7	Conference Room 6	576	
8	Conference Room 7	577	
9	Conference Room 8	578	
10	Conference Room 9	579	
11	Internal Page	543	543 + 00, xx 00: All Call Page Xx: Page Group #
12	Personal VM Page	544	
13	Announcement Page For	545	

No	Feature Name	Code	Remark
	Attendant		
14	Page Auto Answer	546	
15	Internal Page Answer (Meet-Me Page)	547	
16	External Page	548	
17	Internal-External Page All	549	
18	Call Forward Register	554	554 + Type + Destination
19	Pilot Hunt Call Forward Register	514	514 + Type + Destination
20	Pilot Hunt Call Forward Cancel	515	
21	DND Status Change	516	
22	DND Delete	517	
23	Account Code	550	
24	CO Flash	551	
25	Last Number Redial	552	
26	Station Speed PGM	553	
27	Speed Dial	555	
28	MWI Register	557	
29	MWI Answer	558	
30	MWI Cancel	559	
31	Call Back Register	518	
32	Call Back Cancel	519	
33	Group Call Pickup	564	
34	Direct Call Pickup	7	
35	Walking COS	520	
36	Call Parking Location	541	541 + xx Xx: Parking Location (00 ~ 49)
37	PGM Mode Access	521	
38	Two-Way Record	522	
39	VMIB Access	523	
40	AME Access	524	
41	CO Line Access	88	88 + xxx Xxx: CO Line # (001 ~ 200 : MG-300

No	Feature Name	Code	Remark
			01 ~ 80 : MG-100)
42	VM MWI Enable	*8	
43	VM MWI Cancel	*9	
44	MCID Request	*0	
45	Unsupervised Conf Extend	5##	
46	PTT Group Access	524	524 + (0~9,*) 0 ~ 9: PTT Group # *: Log out
47	Hot Desk Log In/Log out	525	
48	Name Register	526	
49	Create Conf Room	527	527 + Conf. Room #
50	Delete Conf Room	528	528 + Conf. Room #
51	Wake Up Register	529	529 + HH:MM
52	Wake Up Cancel	530	
53	Temporarily COS Down	531	
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55	Password Change	533	
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No	Feature Name	Code	Remark
70	Mobile CLI Register	593	
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91	Call Log	685	

Appendix B User Program Codes

In iPECS-LIK

Code	Function	Remarks
10	Enblock Mode Dialing	
11 x	Differential Ring, Intercom	Select Ring Tone 1-8
12 x	Differential Ring, CO/IP line	Select Ring Tone 1-8
13 x	Intercom Answer Mode	Select ICM Signal mode, 1: HF, 2: TONE, 3: Privacy
14 x	Call Coverage Attribute Setting	1+: ON/OFF, 2+: ring delay (0-9)
15 x	Station Ring Download	Select download Ring Tone 0-9
19	Ear&Mic Headset Usage	
21	Knock Down Station COS	
22	Restore Station COS	May require Authorization code
23	Walking COS	May require Authorization code
30	VM Mobile Notify	
31	Station Message Wait Retrieve	
32	CLI/IP Message Wait Retrieve	
33 x	Authorization Code (Password) Entry	Station number +up to 12 digits, no Flex button
34	Assign DID CALL WAIT Button	
35	Message Wait in Executive/Secretary pair	
36	Send SMS Message	
37	Register Mobile Extension	
38	Activate Mobile Extension	
39	Register Mobile Ext. CLI	
41 xx	Set Wake-Up Time	Input time, 24 hour clock
42	Erase Wake-Up Time	
51 xx	Custom/Pre-defined Message Display	Select Message 00-20
52 xx	Register Custom Message	Input up to 24 characters
53 x	Create Conference Room	Input Conf Room (1-9) & password
54 x	Delete Conference Room	Input Conf Room (1-9) & optional password
55	Monitor Conf. Room	
61 x	Headset/Speakerphone Mode	
62 x	Headset Ring Mode	1: Speakerphone, 2: Headset, 3: both
71	LCD Display Mode	
72	Version Display	
73	Background Music	
74 x	Station User Name Registration	Input up to 12 characters

Code	Function	Remarks
75	Display Phone IP Address	
76	Change Phone IP Address	
77	Display Phone MAC IP Address	
78	Network Configuration	
79	Display Phone Version	
80	Assign RECORD Button	Requires VSF/External SMDI VM
81	Assign ISDN CLIR Button	
82	ISDN COLR Button	
84	Assign ACCOUNT CODE Button	
85	Assign LOOP Button	
86	Assign ATD INTRUSION Button	
87	ICM Button	
88	Assign CAMP-ON Button	
89	Assign KEYPAD FACILITY Button	
8#	Assign OHVO Button	
91	CONF Button Assignment	
94	FLASH Button Assignment	
95	MUTE Button Assignment	
96	MONITOR Button Assignment	
97	REDIAL Button Assignment	
98	FWD Button Assignment	
99	Assign PTT Button	
9* xx	{IN-ROOM INDICATION} Button Assignment	(xx : 01~10)
*0	Hot Desk Login Code	
**	Hot Desk Log out Code	
*7	Force Fwd to Dest.	

In iPECS SBG-1000

Code	Function	Remarks
11	Intercom Answer Mode	Select ICM Signal mode, 1: HF, 2: TONE, 3: Privacy
12	*Headset/Speakerphone Mode*	0:Headset, 1:Speaker
13	Select Headset Ring Type	1: Speakerphone, 2: Headset, 3: both
21	Set Wake-Up Time	Input time, 24 hour clock
22	Erase Wake-Up Time	
31	LCD Display Language	
32	SBG Version Display	
33	Background Music	
34	Station User Name Registration	Input up to 12 characters

Code	Function	Remarks
35	Display Phone IP Address	May require Authorization code
36	Display Phone MAC IP Address	
37	Display Phone Version	
38	Network Configuration	
41	Forced FWD to Destination	
42	Call Log Display	
43	CLIR Service	
44	COLR Service	
4*	Assign LOOP Button	
50	Assign CALL BACK Button	
51	Assign CONF Button	
52	Assign MUTE Button	
53	Assign ICM Button	
53	Assign REDIAL Button	

In iPECS-MG

Code	Function	Remarks
11	Intercom Answer Mode	1:H, 2:T, 3:P
12 + Name	User name creation	2 digit for each character
13 + Time	Set wake-up alarm time	HH/mm, 24-hour clock
14	Cancel Wake-up Alarm	
15	Set language for the display	00-14
16	LCD Date Mode Change	DD/MM/YY or MMDDYY
17	LCD Time Mode Change	12 Hour/24 Hour
18	Set Backlight	0-2
21	ICM Ring Type	
22	TRK Ring Type	
23	Ring Download	LIP-Series Only
24	Back Ground Music	
31	Temporary COS	Auth. Code required
32	Retrieve COS	Auth. Code required
33	COS Override (Walking COS)	Auth. Code required
34	Register Password	
35	Call Log Protect	
36	SMS Message Protect	LIP-Series/LDP6000-Series

Code	Function	Remarks
41 + MSG number [xx]	Set Pre-defined Message.	0-9, MSG *: User Custom # Deactivation
42	Create a Station User Message	
43	Send SMS Message	LIP Series/LDP6000 Series
44	Receive SMS Message	LIP Series/LDP6000 Series
51 + x	Activate a mobile phone	X=1-2
52 + x	Register the mobile number	X=1-2
53 + x	Register the mobile CLI number	X=1-2
54 + Rm & Auth Code	Start a Conf Room	
55 + Rm & Auth Code	Close a Conf Room	
61	Speaker/Headset Mode	Speak/Headset/E-MIC
62	Headset Ring Mode	Speaker/Headset/Both
71	Register Station ICLID	
72	View Station ICLID	
81	View IP Address	IP Phone/ DTIM/SLTM
82	View Mac Address	IP Phone/ DTIM/SLTM
83	View IP Phone version	
80	Network Setting	LIP Series
91	System Version	
92	System IP Address	

Appendix C Useful Information : Open Source Software Notice

Open Source Software Notice

This following GPL (General Public License) software used in this product are subject to the GPL License Agreements.
You can obtain a copy of the GPL licenses from Ericsson-LG Web Site (http://www.ericssonlg.com).

GPL License:

4. **u-boot**
5. **bash**
6. **linux**
7. **busybox**
8. **Alsa Libraries**
9. **udhcpc**
10. **ortp**
11. **Curl / LibCurl**
12. **libsrtp**
13. **Expat xml parser**

Ericsson-LG offers to provide source code to you on CD-ROM for a charge covering the cost of performing such distribution, such as the cost of media, shipping and handling upon e-mail request to Ericsson-LG at. : opensource@ericssonlg.com.
This offer is valid for a period of three (3) years from the date of the distribution of this product by Ericsson-LG.

iPECS

LIP-8012E/8024E

User Guide

Please read this manual carefully before operating Phone. Retain it for future reference

iPECS is an Ericcson-LG Brand

ERICSSON LG

Revision History

Issue	Date	Remark
1.0	Mar. 2012	Initial Release
1.1	Oct. 2012	Changed CI to Ericsson-LG

Disposal of your old appliance

1. When the crossed-out wheeled bin symbol is attached to a product, it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by government or the local authorities.
The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

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Important Safety Information

To prevent unexpected danger or damage please read this information before installing or attempting to repair you phone. Warning and Caution information is provided to alert the consumer of known dangers:

Warning: To reduce the possibility of electric shock, do not expose your phone to high humidity areas, such as a bathroom, swimming area, etc.

Caution: Use only Ericsson-LG approved batteries and desktop chargers to avoid the damage to the phone. Using other batteries or chargers voids your warranty and may cause an explosion.

Warning

1. Only trained and qualified service personnel shall install, replace or service the phone.
2. Do not spill liquid life water on the phone. If so, call the service center as this may result in fire or electric shock.
3. If you see smoke or smell something during use, unplug the power cord and the phone line. Call the service center immediately.
4. If the power adapter is used, do not touch the plug with wet hands. This may result in a fire or an electric shock or equipment damage.
5. Do not use the phone during a thunderstorm. Lightning strike may result in fire, severe electrical or acoustic shock.
6. Do not use the power adapter if the power cord or wall outlet is damaged. This may result in fire or an electric shock.

Caution

1. Ensure that children do not pull on phone cords. This may injure children or result in equipment damage.
2. The ear-piece houses a magnetic device which may attract pins or small metal objects. Keep headset clear of such objects and check before use.
3. Avoid placing the phone in an area that is excessively dusty, damp or subject to vibration.
4. Choose a site for the phone that is well-ventilated and dry.
5. Do not plug multiple plug-packs into one power outlet. This may result in the plug overheating and may result in a fire or plug pack failure.
6. Do not put heavy things on the phone.
7. Do not drop or throw the phone.
8. Static electricity discharge will damage electronic components.
9. Keep out of direct sunlight and away from heat.
10. No user-serviceable parts inside. Do not insert a screwdriver or any metal objects into the phone. This may cause electric shock or damage the equipment and will render the warranty void.
11. Clean the phone with a soft, dry cloth only. Do not use volatile liquids such as petrol, alcohol, or acetone as this may cause a fire or result in discoloration or damage to plastics. Do not clean with wax or silicon products as these may enter the equipment and cause operation to become unstable.

[EU]

European Union Declarations of Conformity

Ericsson-LG Co., Ltd. declare that the equipment specified in this document bearing the " CE" mark conforms to the European Union Radio and Telecommunications Terminal Equipment Directive(R&TTE 1999/5/EC), including the Electromagnetic Compatibility Directive(2004/108/EC) and Low Voltage Directive(2006/95/EC).
Copies of these Declarations of Conformity (DoCs) can be obtained by contacting your local sales representative.

[USA/CSA]

FCC/IC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 /RSS-GEN of the FCC/IC rules. Operation is subject to the following two conditions:
(1)This device may not cause harmful interference; and (2) This device must accept any interference received, including interference that may cause undesired operation.
This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.
The use of this device in a system operating either partially or completely outdoors may require the user to obtain a license for the system according to the Canadian regulations.

CAUTION : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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1. Introduction

1.1 General

Your telephone is connected to an advanced-technology, highly-versatile, fully-featured telecom system designed to make office communications easy and productive. Employing state-of-the-art Voice over Internet Protocol (VoIP) technology, voice and data converge on a single IP packet network. Because each iPECS Phone is an IP appliance, it can be moved easily throughout the office LAN and maintain normal operation.

1.2 Feature Information

We have taken every effort to make this user guide simple and straightforward. The guide starts with the simpler operations of the iPECS Phone Speakerphone, moves on to receiving and placing calls, and then to more advanced features. Each section includes a brief and basic description of each feature and step-by-step operation instructions.

The operations shown in this guide use the System's base default Numbering Plan. Your specific Numbering Plan may be different. Some features may not be available for you to access or may be subject to certain limitations based on the set-up of the System.

Under certain operating conditions, this equipment may not be able to make emergency calls. Alternative arrangements should be made for access to emergency services.

1.3 Feature Groupings

Every effort has been taken to divide the features into a logical and consistent sequence so that features can be quickly located.

Features have been divided into groups, *Receiving Calls*, *Placing Calls* etc. Within each group, features are arranged according to the difficulty of operation and frequency of use.

1.4 iPECS LIP-8012E & 8024E Gigabit Phone Description

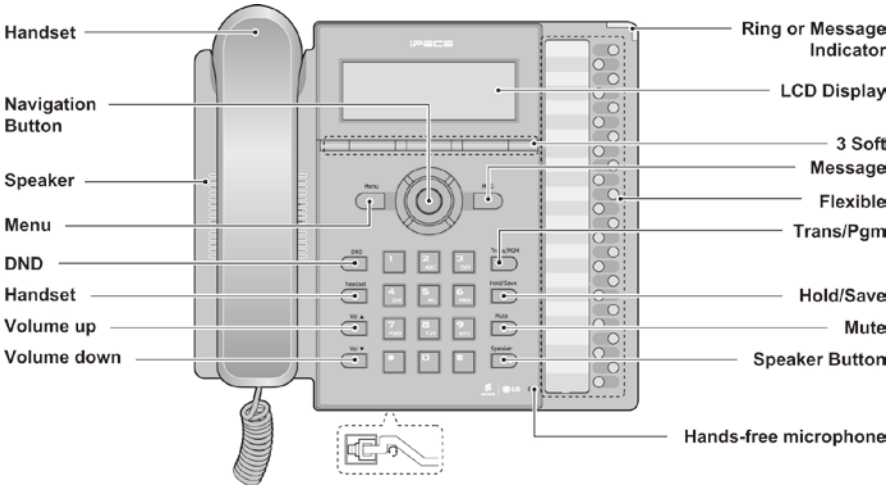
The iPECS LIP-8012E and LIP-8024E Gigabit Phones (shown) incorporate the latest in VoIP technology and user interface to provide you with a cost effective, simple to use, productive communications tool. It includes a large 3-line (LIP-8012E) or 4-line (LIP-8024E) 24-character per line LCD (refer to Phone Diagrams, next page). The bottom line of the display is an interactive menu accessed with the 3 Soft buttons just below the display. The Navigation button in the lower center of the Phone allows you to move through the menu choices when more than three selections are available.

Features and functions of your iPECS are accessed either using the Fixed or Flexible buttons or by selecting a menu item using the Soft buttons. In the remainder of this User Guide, the Fixed or Flexible buttons are shown with a box surrounding the BUTTON designation while Soft button menu selections are shown with a double underline.

The LCD display screens shown in this User Guide are captured from the LIP-8024E. The screen may differ slightly in the LIP-8012E.

LIP-8012E Gigabit Phone

LIP-8024E Gigabit Phone



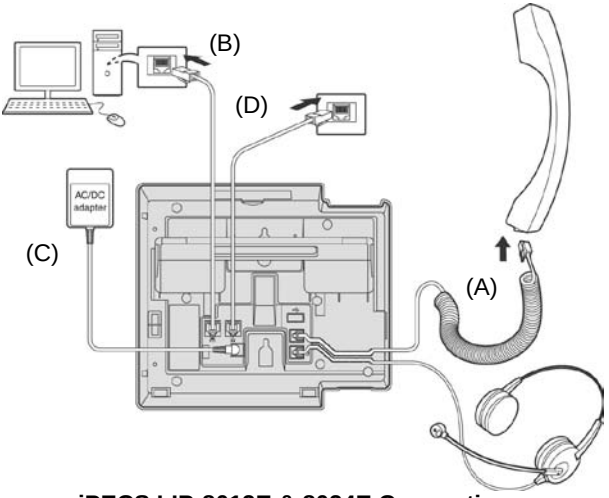
LIP-8024E Gigabit Phone Diagram

1.5 LIP-8012E & 8024E Phone Installation

LIP Gigabit Phones and Consoles can be connected to any standard 10/100 Base-T Ethernet switch port (shown in graphic). When connected to an 802.3af compliant switch port (ex., POE8), LIP Gigabit Phones and series consoles can derive power from the Ethernet port. When LAN power is not available, the optional AC/DC adaptor must be used. The following image shows how to connect the handset, power cord, and LAN cable to the phone.

1.5.1 Phone Connections

The LIP-8012E and LIP-8024E each have 2 RJ-45 and 10/100 Base-T LAN connection ports (refer to following graphic). One port is for connecting to the LAN ('D' in graphic), and the other can be connected to a desktop data device such as a PC ('B' in graphic), or another LAN interface terminal (refer to iPECS Hardware and Installation Manual).



iPECS LIP-8012E & 8024E Connections

1.5.2 Wiring Connectors

The LIP-8012E & LIP-8024E each have two (2) 10/100 Base-T Ethernet ports, a “LAN” port and a “PC” port. An intelligent switch, which implements voice packet priority, connects the two (2) ports. This permits the LAN to be shared between the LIP Gigabit Phone and the desktop PC or other Ethernet terminal without significant affect on the voice or data traffic. The “LAN” port is connected to the LAN as described above for the single port Phones. The “PC” port is connected to a desktop device using any standard straight through category 5 cable.

1.5.3 Power

All LIP-8000 series phones can be powered by the AC/DC Adapter-K- (48 VDC @0.3A) or over the LAN cable using the POE8 or other 802.3af compliant switch.

If using the AC/DC Adapter, after connecting the Phone to the LAN, the Adapter’s DC voltage plug is inserted into the power-input jack in the underside of the Phone. One end of the AC power cord is inserted into the mating receptacle of the AC Adapter, and the other end is inserted into the AC power outlet.
NOTE—LIP-8000 series consoles are powered through the flat cable used to connect the console to the IP

Gigabit phone (shown). Up to 2(without LIP-8048DSS) or 4(with LIP-8048DSS) consoles can be chain-link connected to the phone.

1.5.4 Wall Mount

The LIP-8000 series phones can be wall mounted as needed. The following instructions describe how to perform a wall mount installation. For more information on installing your LIP-8000 series phone, refer to the **iPECS Hardware Description and Installation Manual**.

- Mark and drill two (2) 7mm holes for plastic wall anchors.
- Insert the two (2) anchors into the holes and insert and tighten the each screw leaving about 2.5 mm (1/8-inch) of the screw exposed.
- Slide the LIP-8000 phone over the screws and assure the phone is secure.
- NOTE—It may be necessary to remove the phone and tighten or loosen the screws for a secure mounting.

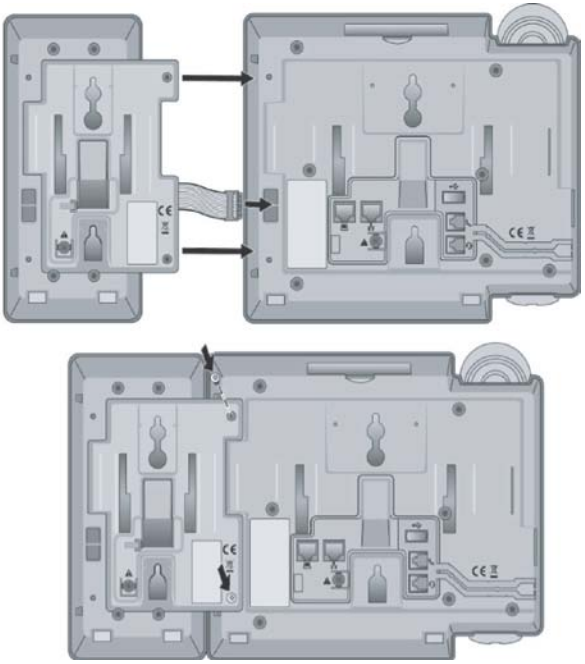
1.6 DSS(Direct Station Select) Console Installation

A DSS console can be installed with the LIP-8000E series phone as shown in Figure. Up to 3 consoles may be daisy chained as shown using the flat cable provided. Keep in mind the following conditions when installing LIP-8000 DSS consoles.

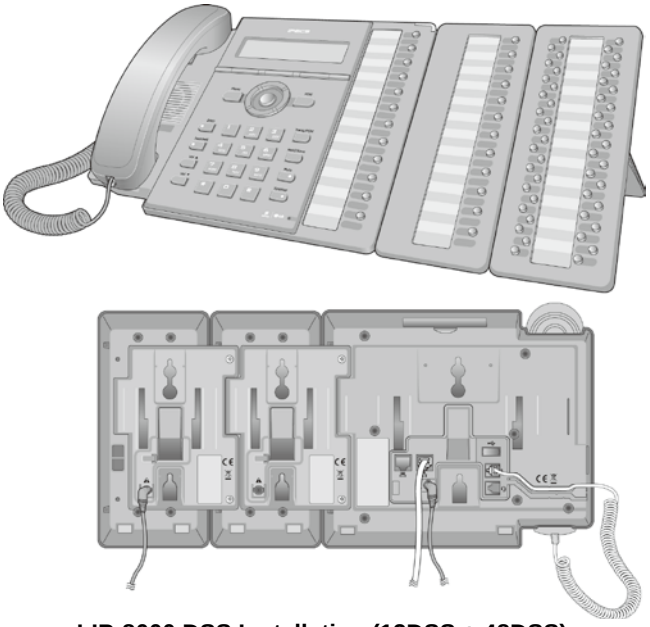
1. The AC/DC adapter must be used for LIP-8048DSS.
2. Up to two (2) LIP-8012LSS and/or LIP-8012DSS can be installed with LIP-8000E Phone.
3. The LIP-8048DSS must be separately powered.

The available DSS is as follows:

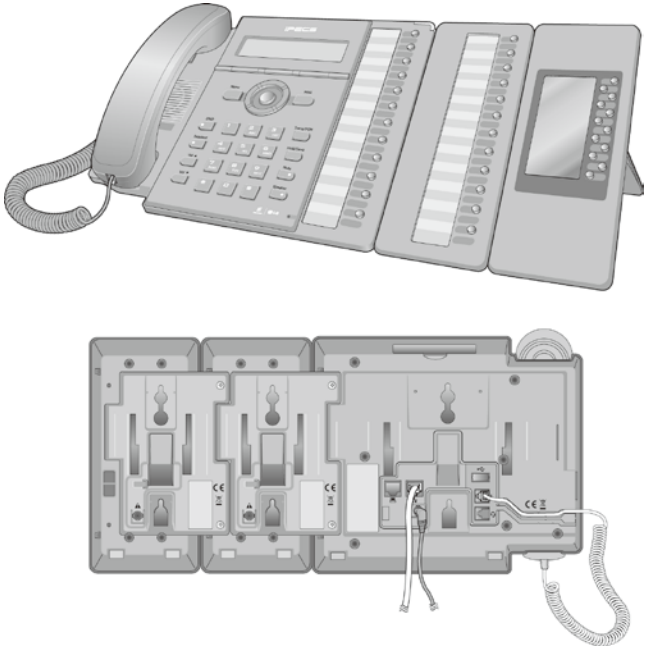
1) LIP-8012DSS
2) LIP-8012LSS
3) LIP-8048DSS



LIP-8000 DSS Installation



LIP-8000 DSS Installation (12DSS + 48DSS)



LIP-8000 DSS Installation (12DSS + 12LSS)

2. LCD, Speakerphone & Related Featrues

2.1 Using the Display Menu

The Liquid Crystal Display (LCD) of the iPECS LIP-8012E has three lines, and the LIP-8024E has four lines of 24 characters each. The LCD is used to convey information to you. It provides the date, time and station number on the display while idle. It will also provide called/calling name/number display, feature status and an interactive menu to guide you through feature access and *User Program* selections:

In iPECS-LIK

To activate the Display Menu:

- Press MENU button,
- Press the Navigation up/down buttons and press the OK Soft button to select,
  OR
- Dial the associated digit (Menu selections shown):

1. PHONE SETTING
2. CONFERENCE ROOM PGM
3. ICM SMS

BACK OK

4. NETWORK CONFIG
0. ATTENDANT

- BACK OK

In iPECS SBG-1000

To activate the Display Menu:

- Press MENU button,
- Press the Navigation up/down buttons and press the OK Soft button to select,
  OR
- Dial the associated digit (Menu selections shown):

1. PHONE SETTING
2. NETWORK CONFIG

BACK OK

In iPECS-MG

To activate the Display Menu:

- Press MENU button,
- Press the Navigation up/down buttons and press the OK Soft button to select,
  OR
- Dial the associated digit (Menu selections shown):

```
1. PHONE SETTING
2. NETWORK CONFIG

BACK        OK        EXIT
```

2.1.1 Phone Setting

In iPECS-LIK & iPECS SBG-1000

To configure the Phone:

- Press MENU button and 1 (Phone Setting),
- The following menu displays:

```
1. STATION NAME PROGRAM
2. ICM RING
3. CO RING
BACK        OK
```

```
4. PASSWORD PROGRAM
5. LANGUAGE PROGRAM
6. STA RING DOWNLOAD
   • BACK        OK
```

```
7. BACKLIGHT
8. FONT PROGRAM

BACK        OK
```

- **Station Name Program**—Input up to 12 digits using the keypad (press DND button to backspace/delete a character), then press the OK Soft button. To input characters:
- Press the second Soft button to select ABC> or abc> mode,
- To input the first character of a button, press the button 1 time (ex., for ‘a’, press 2 button once),
- To input the second character of a button, press the button 2 times (ex., for ‘b’, press the 2 button twice.
- To input the third character of a button, press the button 3 times (ex., for ‘f’, press the 3 button three times.

- **ICM Ring/CO Ring—**Use Next Soft button to move through list of ring types, and press OK Soft button to select.
- **Password Program—**Enter the current password and press the OK Soft button, then enter the new password and press the OK Soft button.
- **Language Program—**Use Navigation up/down buttons to highlight available languages supported, and press OK Soft button to select.
- **Station Ring Download—**Select the ring position (5-8) and select the ring file; press the SAVE Soft button to select.
- **Backlight—**Use Navigation up/down buttons to select the operation of the backlight, and press the OK Soft button to select.
- **Font Program—** Use Navigation up/down buttons to select the LCD Font, and press the OK Soft button to select.

In iPECS-MG

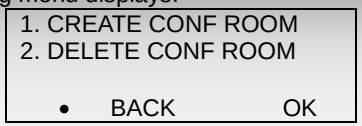
- **Set Font Type**—Select the font type(0 for new roman, 1 for gothic), and press the OK Soft button to select.
- **Set Contrast**—Press the VOL ▲▼ buttons or Use Navigation up/down buttons to adjust the brightness, then press the OK Soft button to select.

2.1.2 Conference Room (iPECS-LIK)

The User can create and delete Conference rooms.

To configure a Conference Room:

- Press MENU button and 2 (Conference Room),
- The following menu displays:



- Press the Navigation up/down keys to highlight and then press the OK Soft button to select,
  OR
- Dial the number associated to the selection,
- Enter the room number and dial the password,
- Press the OK Soft button.

2.1.3 ICM SMS (iPECS-LIK)

The user can send SMS messages to other stations and retrieve received SMS messages.

To retrieve a SMS message:

- Press MENU button and 3 (ICM SMS),
- The following menu displays:

```
1. SEND MESSAGE
2. IN BOX(03)

 BACK          OK
```

- Press the Navigation up/down keys to highlight and then press the OK Soft button to select,
  OR
- Dial the number associated to the selection (2); the messages will display.

To send a SMS message:

- Select Mode - select 1 if resending a previous message, or select 2 if sending a new message,
- Enter the Station range (ex., 100-105=100105),
- Enter message (if in mode 2),
- Press the OK Soft button.

2.1.4 Network Config.

The User can review the current network configuration or modify a new phone network configuration.

To access Network Config. settings:

- Press MENU button and 4(iPECS-LIK)/2(iPECS SBG-1000, iPECS-MG),
- Enter the password (default=147*); the following will display:

```
MFIM #[1/2]  ?
MFIM #1  - CHANGE[#]
```

- Press the # key to toggle between multiple profiles (MFIM),
- Press the VOL ▲ ▼ buttons to advance to the next network configuration item,
- Press the HOLD/SAVE button to save each setting.

To configure 802.1x:

- In Network Config. Menu, use VOL ▲ ▼ buttons to locate the 802.1x configuration screen (shown),

```
802.1x ?
[ENABLED] – CHANGE[#]
```

- Enable in 802.1x menu and press the **Hold** button.
- Enter ID in **802.1x USER ID** menu (It appears when 802.1x is enabled.) and press the **Hold** button.
- Enter Password in **802.1x PASSWORD** menu (It appears when 802.1x is enabled.) and press the **Hold** button.

To set LLDP:

- In Network Config. Menu, use VOL ▲ ▼ buttons to locate the LLDP configuration screen (shown),

```
• LLDP?
• [ENABLED] – CHANGE [#]
```

- Enable in LLDP? menu and press the **Hold/Save** button.

To configure VPN:

- In Network Config. Menu, use VOL ▲ ▼ buttons to locate the DNS Address menu.
- Enter DNS address in **DNS ADDRESS** menu
- Use VOL ▲ ▼ buttons to locate the VPN configuration screen (shown),

VPN ?
[ENABLED] – CHANGE[#]

- Enable in VPN Menu and press the **Hold** button.
- Following steps are available when VPN is enabled.
- Enter VPN Server address in **VPN SERVER IP** menu and press the **Hold** button.
- Enter TCP/UDP port number for both local and remote in **VPN PORT** and press the **Hold** button. The default value is 1194.
- In **VPN USER ID**, enter ID and press the Hold button.
- In **VPN USER PASSWORD**, enter Password and press the **Hold** button.

To set default Config. settings:

- In Network Config. Menu, use VOL ▲ ▼ buttons to locate the Default Config. Screen (shown),

SET DEFAULT CONFIG(DOT:*)
•

- Press the * key.

To exit Config. settings:

- Press the SPEAKER button,
- Press the * key to exit,
  OR
- Press the # key to Reset/Reboot the phone with new setting.

2.1.5 Attendant menu (iPECS-LIK & iPECS SBG-1000)

The Attendant menu is only available on the System Attendant phone.

In iPECS-LIK

To access the Attendant menu:

- Press MENU button and 0 (Attendant); the following will display:

1. DATE/TIME SET 2. SET ICM ONLY MODE 3. RESTORE COS BACK OK
4. MONITOR CONF ROOM 5. DELETE CONF ROOM BACK OK

- **Date/Time Set**—Enter mm/dd/yy, and press OK Soft button; enter hh/mm, and press OK Soft button.
- **Set ICM Only Mode**—Dial the Station Range for ICM only calls (ex., 103-108=103108), and press the OK Soft button.
- **Restore COS**—Dial the Station Range for COS restoring (ex., 103-108=103108), and press the OK Soft button.
- **Monitor Conference Room**—Enter the Conference Room number to view the number of attendees in the Conference Room.
- **Delete Conference Room**—Enter the Conference Room number and press the OK Soft button to delete.

In iPECS SBG-1000

To access the Attendant menu:

- Press MENU button and 0 (Attendant); the following will display:

1. SET ICM ONLY MODE 2. RESTORE COS BACK OK

- **Set ICM Only Mode**—Dial the Station Range for ICM only calls (ex., 103-108=103108), and press the OK Soft button.
- **Restore COS**—Dial the Station Range for COS restoring (ex., 103-108=103108), and press the OK Soft button.

2.2 Using the Speakerphone

Activate the iPECS Speakerphone at any time (except forPaging) in place of lifting the handset to receive or place calls.

Additionally, you may switch between the handset and Speakerphone during a call. By keeping the handset Off-hook, the **Group Listen** feature is activated, which provides incoming audio over the speaker with outgoing audio from the handset. This permits a local 'group' to listen to both sides of the conversation without interfering with the conversation.
While in a conversation using the Speakerphone, **Mute** the microphone using the MUTE button. When Mute is active, the MUTE button LED will be illuminated. To turn off **Mute,** press the MUTE button again..
With **Auto Speaker Select**, activating or accessing a feature by pressing its button will activate the Speakerphone automatically.

When using a Headset, the SPEAKER button controls the ON/OFF-hook state for the phone.

To use the Speakerphone to answer or place a call:

- Press SPEAKER, the phone goes off-hook and sends audio to the speaker and the microphone.

To control the volume of the Speakerphone or handset:

- Press the ▼ VOLUME ▲ button.

To Mute the microphone:

- Select the MUTE button.

To turn off Mute (turn the microphone ON):

- Press the MUTE button.

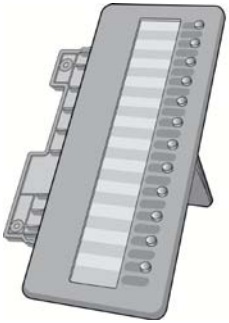
To activate Group Listen while on an active handset call:

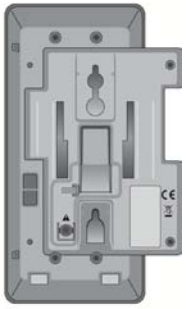
- Press the SPEAKER button.

2.3 Using a Serial DSS

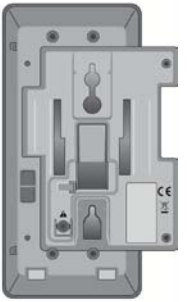
The LIP-8012ESS, LIP-8012LSS, and LIP-8048DSS can be connected with the LIP-8012E or LIP-8024E using the RS-232 cable. Be sure to verify the serial DSS and LSS capacities with the iPECS System to ensure usability (refer to iPECS Manual). The following graphics show the front and rear view of each.

NOTE—A Linked Pair slave station cannot use a serial DSS. iPECS SBG-1000 does not support serial DSS.

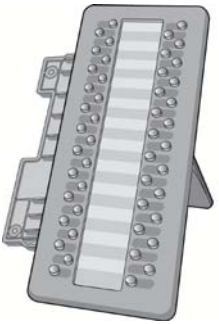


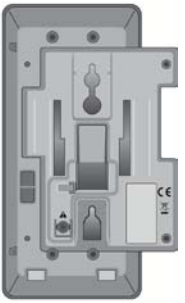


LIP-8012ESS



LIP-8012LDSS





LIP-8048DSS

In iPECS-LIK

To use a Serial DSS:

- Verify the Station has Serial DSS Usage authority (Admin PGM111-Flex21),
- Verify the DSS power is OFF (LIP-8048DSS only),
- Power-OFF the phone,
- Connect the serial DSS to the phone,
- Power-ON the phone and the DSS (LIP-8048DSS only),
- Program the DSS button using Web Admin Programming or PGM115,
- Edit LSS label from Admin PGM129 (default label is provided from MFIM).

To initialize Serial DSS Database:

- Enter Admin PGM111-Flex21,
- Select Station range to clear Serial DSS Database,
- Dial 0,
- Press the HOLD/SAVE button.

In iPECS-MG

To use a Serial DSS:

- Set the Station's Serial DSS Usage Map (Admin PGM120-Flex2),
- Verify the DSS power is OFF (LIP-8048DSS only),
- Power-OFF the phone,
- Connect the serial DSS to the phone,
- Power-ON the phone and the DSS (LIP-8048DSS only),
- Program the DSS button using Web Admin Programming or PGM126,
- Edit LSS label from Admin PGM126.

To initialize Serial DSS Database:

- Clear the Station's Serial DSS Usage Map (Admin PGM120-Flex2),
- Admin PGM120-Felx3 to reset the phone.

3. Receiving Calls

3.1 Answering a Call While Idle

There are 3 basic types of incoming calls; internal/external ringing calls, **Intercom Voice Announce** calls, and *Hold* recalls.
Your phone may be assigned **Ringing Line Preference**; in this case, calls that ring are answered by lifting the handset. Otherwise, you must press the flashing Flex button.
External calls to an iPECS Phone will appear under the CO/IP line or a **LOOP** button.
External calls are from CO lines or VoIP channels that are programmed to ring at your phone. For external calls, **Delay Ring** may be assigned allowing others to answer the call before the call rings at your phone.
Calls can be forwarded in some manner from another user; if providing call coverage for other users, you may also receive **Station Call Coverage** calls.
Calls placed on **Hold**, including Transfers, parked calls, etc. will recall if left on hold for too long.
ICM Voice Announce calls are answered based on the **ICM Signaling mode** at the receiving phone; in Hands-free (HF) mode, after the splash tone and announcement, speak normally into the microphone. In the Privacy (PV) mode, lift the handset to respond. The **ICM Signaling mode** can be assigned in *Station Programming*.
The LCD will display the calling number or, if available, the name of the station or CO/VoIP line, **CO Line Name Display**.

To answer a call ringing at your phone:

- Lift the handset or press the flashing Flex button (as needed), the call will be connected.

To respond to an Intercom Voice Announce call:

- In **HF** mode, simply speak as normal into the microphone,
- OR
- In **PV** mode, lift the handset to respond.

3.2 Responding to a Call While Busy

While you are busy on another call, you may receive a Muted Ring, Camp-On tones, or Voice-Over announcements. Muted Ring is provided over the speaker of your Phone indicating a **Call Waiting**. You also may receive **Camp On** tones, a burst of tones on top of the existing call, as an indication of another call waiting.

While busy, certain stations can activate **Voice-Over** to your phone. In this case, audio is received from both the active call and the **Voice Over** announcement at the same time.

Respond to any of these **Off-hook Signals** in one of several ways; place the existing call on **Hold** and respond to the new incoming call, activate *One-time DND*, send a *Silent Text Message*, or ignore the new call.

Silent Text Message requires a TEXT MESSAGE button (not available on a SLT or other non-display terminal).

The Attendant or Secretary may use **Intrusion** to announce a call while you are busy.

To answer a Call Waiting:

- Press HOLD/SAVE, and/or
- Press the flashing CO/IP LINE button.

To activate One-time DND:

- Press the DND button.

To send a Silent Text Message:

- Press the programmed TEXT MESSAGE button,
- Select the desired message to send.

3.3 Using Answering Machine Emulation (AME)

When a call is connected to your voice mail, you can screen the call as with a normal Answering Machine. The caller's voice is played over your speaker while the message is being recorded. There are two methods of notification and call screening provided, LED blink mode or Speaker hearing mode.

Ring Mode (iPECS-LIK & SBG)/LED Blink Mode (iPECS-MG)—the Answering Machine Emulation (AME) Flex button will flash to notify you of a call. You may press the Flex button to hear the caller as the voice message is stored.

Speaker Mode (iPECS-LIK & SBG)/Speaker Hearing Mode (iPECS-MG)—when the call is sent to the voice mailbox, the caller's voice is automatically broadcast over the speaker of your iPECS Phone.
You may terminate screening, leaving the caller in voice mail to record a message, talk with the caller and record the conversation in the mailbox, or answer the call and disconnect the Voicemail. The AME feature is only available when using the iPECS VMIB Voice Mail; a MUTE and AME button should be programmed (refer to Appendix A User Program Codes).

To screen a call in Ring mode (iPECS-LIK & SBG)/LED blink mode (iPECS-MG):

- Press the flashing AME button, the caller's voice is broadcast over the station speaker and stored in the voice mailbox (in the Speaker hearing mode, broadcast is automatic).

To stop the voice broadcast and leave the caller in Voice Mail:

- Press the illuminated SPEAKER button.

To talk with the caller and record the conversation in Voice Mail:

- Press the MUTE button.

To answer the call and cancel the voice message recording:

- Press the illuminated AME button, the caller is connected and the Voice Mail disconnected.

3.4 Differential Ring Signals

When multiple phones in a small area ring, it can be difficult to tell which are ringing. The iPECS Phone has 14 **Ring Tones** available for differentiating one phone's ringing from another. Four of the tones are stored in the phone permanent memory; the remaining ten tones are in the system memory. Four of these ten can be downloaded into the phone memory for use as the 5th to 8th **Ring Tone**.

In iPECS-LIK

To download a Ring Tone from System memory:

- Press TRANS/PGM,
- Dial 1 for Ring Tones,
- Dial 5 for Ring Tone download,
- Dial the phone's memory location to receive the tone (5-8),
- Dial 0-9 for the desired tone number; a confirmation tone is heard,
- Press HOLD/SAVE to download.

To select a Ring Tone from phone memory:

- Press the TRANS/PGM button,
- Dial 1 for Ring Tones,
- Dial 1 or 2 for Internal or External ring,
- Dial 1-8 for the desired tone number; a confirmation tone is heard,
- Press HOLD/SAVE to make the selection.

In iPECS-MG

To download a Ring Tone from System memory:

- Press TRANS/PGM,
- Dial 2 for Ring Tones,
- Dial 3 for Ring Tone download,
- Dial the phone's memory location to receive the tone (5-8),
- Dial 0-9 for the desired tone number; a confirmation tone is heard,
- Press HOLD/SAVE to download.

To select a Ring Tone from phone memory:

- Press the TRANS/PGM button,
- Dial 2 for Ring Tones,
- Dial 1 or 2 for Internal or External ring,
- Dial 1 for Keyset Ring Source,
- Dial 1-8 for the desired tone number; a confirmation tone is heard,
- Press HOLD/SAVE to make the selection.

3.5 Answering Calls at Night

In the Night mode, **Loud Bell Control** may be used to send ring signals to external bells. You may answer these calls with **Universal Night Answer (UNA)**.

To answer a call ringing during night mode:

- Lift the handset,
- Dial 567(iPECS-Lik)/587(iPECS-MG) (UNA code).

3.6 Answering Calls to Other Stations

When nearby stations are ringing, you may pick-up (answer) the call. Select to answer a call ringing at a specific station (**Directed Call Pick-Up**) or you may choose to answer the oldest call ringing to your station group (**Group Call Pick-Up**). Assign a Flex button with the Group Call Pick-Up code (566) for one-touch access. **NOTE—Pick-Up will not answer calls on the ringing station Private Line unless the line appears on your phone.**

To answer a call ringing at another station:

- Lift the handset,
- Dial **7 (**Directed Call Pick-Up code),
- Dial the Intercom Number of the ringing station; the call will be connected.

To answer a call ringing at a station in your group:

- Lift the handset,
- Dial **566 (**Group Call Pick-Up code), the call is connected.

3.7 Using Do-Not-Disturb (DND) to Block Incoming Calls

Activate Do-Not-Disturb when you wish to not be interrupted; the phone will block incoming calls. Internal callers will receive a fast busy tone and the display will show the DND status. Activate Do-Not-Disturb while ringing(One-Time DND); Ringing terminates and the caller will get a fast busy tone and it requires a DND button.
When an Executive activates DND, calls are forwarded to the paired Secretary automatically.

The Attendants and Secretary may be able to activate **DND Override** and **Intrude** on an active call. The Attendants may also cancel DND at other stations.

To toggle DND ON and OFF:

- Press the DND button.

3.8 Forwarding Calls

3.8.1 Forwarding calls to another Station or Voice Mail

Incoming calls may be diverted to other resources of the system. Resources include other stations, **VMIM/VSF Voice Mail** and **External Voice Mail**. Your LCD and the LCD of the forward receiver will both indicate the forward status.

Call Forward can be activated from your phone or from a different station (**Call Forward, Remote**). You may define the conditions or 'type of forward' as below:

1: **Unconditional**—all calls to the station, except recalls, are forwarded.

2: **Busy**—Immediately forwards all calls, except recalls, when the station is busy.

3: **No Answer—**forwards all calls to the station, except recalls, when the station does not answer within the No Answer timer.

4: **Busy/No Answer—**forwards calls if the station is busy or does not answer within the No Answer timer.

When you forward calls from a different station, you may need to enter your *Authorization Code*.

Calls on a Private Line will not forward except to a station with an appearance of the Private Line or to Voice Mail.

To activate Call Forward from your phone to another phone or internal system resource:

- Lift the handset,
- Press the Fwd Soft button,
- Dial the type of forward code 1-4,
- Dial the destination number.

To deactivate Call Forward from your phone:

- Lift the handset,
- Press the Fwd Soft button,
- Dial #.

To activate Call Forward for your phone from a different phone within the System (Call Forward, Remote):

- Lift the handset,
- Press the Fwd Soft button,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization code (Station number & Password),
- Dial the 'type of forward' code 1-4,
- Dial the destination number.

To deactivate Call Forward, Remote:

- Lift the handset,
- Press the Fwd Soft button,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization code (Station number & Password),
- Press the # key.

3.8.2 Forwarding calls to an external number

Forward calls to an external destination; calls can be forwarded from an internal station or a remote location. You may define the conditions or 'type of forward' as listed below:

1: **Unconditional**—all calls to the station, except recalls, are forwarded.

2: **Busy**—Immediately forwards all calls to the station, except recalls, when station is busy.

3: **No Answer—**forwards all calls to the station, except recalls, when the station does not answer within the No Answer timer.

4: **Busy/No Answer—**forwards calls if the station is busy or does not answer within the No Answer timer.

When you forward calls from a different station or a remote location, you may need to enter your *Authorization Code*. In addition, from a remote location, you must access the system through a *DISA* enabled CO line.

In iPECS-LIK & iPECS SBG-1000

To activate Call Forward, Off Premise (forward to an external number) from your phone:

- Lift the handset,
- Press the Fwd Soft button,
- Dial the type of Forward code (1-4),
- Press Speed Soft button,
- Dial Speed Dial bin number,
- Replace the handset, return to idle.

To activate Call Forward, Off Premise (forward to an external number) from a different phone within the System:

- Lift the handset,
- Press the Fwd Soft button,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization code (your Station number + Password),
- Dial the type of Forward code (1-4),
- Press Speed Soft button,
- Dial Speed Dial bin number,
- Replace the handset, return to idle.

To activate Call Forward, Off Premise (forward to an external number) from a remote location:

- Lift the handset,
- Dial the telephone number of a DISA assigned CO line,
- While receiving dial-tone, dial 554 (Call Forward feature code),
- Dial your Authorization Code (your Station number + Password),
- Dial the type of Forward code (6-9),
- Dial Speed Dial bin number,
- Replace the handset, return to idle.

In iPECS-MG

To activate Call Forward, Off Premise (forward to an external number) from your phone:

- Lift the handset,
- Press the Fwd Soft button or dial 554
- Dial the type of Forward code (1-4),
- Dial Telephone number,
- Replace the handset, return to idle.

To activate Call Forward, Off Premise (forward to an external number) from a different phone:

- Lift the handset,
- Press the Fwd Soft button or dial 554,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization code (your Station number + Password),
- Dial the type of Forward code (1-4),
- Dial Telephone number,
- Replace the handset, return to idle.

3.8.3 Forwarding callers to a Text Message

Using an iPECS Phone, the system can be setup to return a 'Text Message' to internal callers. When calling your Station, internal callers will automatically receive the selected message or you can send a text message you select in response to an internal call, **Silent Text Message**.

There are 11 **Custom Display Messages** each up to 24 characters. Ten can be assigned by the Attendant and one assigned by you.

In addition, there are ten fix Pre-Defined Text Messages; some allow auxiliary input for time, date, etc. (as shown in message list).

In iPECS-LIK

Message 01:	LUNCH RETURN AT hh:mm
Message 02:	ON VACATION RETURN AT DATE mm:dd
Message 03:	OUT OF OFFICE RETURN AT TIME hh:mm
Message 04:	OUT OF OFFICE RETURN AT DATE mm:dd
Message 05:	OUT OF OFFICE RETURN UNKNOWN

Message 06:	CALL (enter up to 17 digits)
Message 07:	IN OFFICE STA xxxx
Message 08:	IN MEETING RETURN AT TIME hh:mm
Message 09:	AT HOME
Message 10:	AT BRANCH OFFICE

In iPECS-MG

Message 1:	LUNCH RETURN AT hh:mm
Message 2:	ON VACATION RETURN AT DATE mm:dd
Message 3:	OUT OF OFFICE RETURN AT TIME hh:mm
Message 4:	OUT OF OFFICE RETURN AT DATE mm:dd
Message 5:	OUT OF OFFICE RETURN UNKNOWN
Message 6:	CALL (enter up to 17 digits)
Message 7:	IN OFFICE STA xxxx
Message 8:	IN MEETING RETURN AT TIME hh:mm
Message 9:	AT HOME
Message 0:	AT BRANCH OFFICE
*	User Custom Message
#	Deactive

In iPECS-LIK

To activate Custom or Pre-Defined Message Forward:

- Press TRANS/PGM,
- Dial User Program feature code 51,
- Dial the two-digit text Message code (00-20),
- Dial any auxiliary input for messages 01-04 and 06-08,
- Press HOLD/SAVE, forward confirmed.

To cancel activated Message:

- Press the Fwd Soft button,
- Dial #.

To program the Station Custom Message (00) at your station:

- Press TRANS/PGM,
- Dial User Program feature code 52,
- Enter Message contents, up to 24 characters, using the following Character Entry Chart:
-

Q – 11 Z – 12 . – 13 1 – 10	A - 21 B - 22 C - 23 2 - 20	D - 31 E - 32 F - 33 3 - 30
G – 41 H - 42 I - 43 4 - 40	J - 51 K - 52 L - 53 5 - 50	M - 61 N - 62 O - 63 6 - 60
P - 71 R - 72 S - 73 Q - 7* 7 - 70	T - 81 U - 82 V - 83 8 - 80	W - 91 X - 92 Y - 93 Z - 9# 9 - 90
*1 - Blank *2 - : *3 - ,	0-00	#

Character Entry Chart

- Press HOLD/SAVE, to save the message.

In iPECS-MG

To activate Custom or Pre-Defined Message Forward:

- Press TRANS/PGM,
- Dial User Program feature code 41,
- Dial the one-digit text Message code (0-9),
- Dial any auxiliary input for messages 1-4 and 6-8,
- Press HOLD/SAVE, forward confirmed.

To cancel activated Message:

- Press the Fwd Soft button,
- Press FWD button or dial 554,
- Dial #.

To program the Station Custom Message (00) at your station:

- Press TRANS/PGM,
- Dial User Program feature code 42,
- Enter Message contents, up to 24 characters, using the following Character Entry Chart:

Dial Pad button	Letter Type								
	Uppercase (ABC)				Lowercase (ABC)				Num
	Button depressions								
	1	2	3	4	1	2	3	4	1
1	@	:	/	<	@	:	/	<	1
2	A	B	C		a	b	c		2
3	D	E	F		d	e	f		3
4	G	H	I		g	h	i		4
5	J	K	L		j	k	l		5
6	M	N	O		m	n	o		6
7	P	Q	R	S	p	q	r	s	7
8	T	U	V		t	u	v		8
9	W	X	Y	Z	w	x	y	z	9
0	.	,	?	!	.	,	?	!	0
*	*				*				*
#	#				#				#

Character Entry Chart

- Press HOLD/SAVE, to save the message.

4. Placing Calls

4.1 Internal Calls

You can place calls to other stations in the system over the Intercom. The call will ring, or for an **ICM Voice Announce** call, a splash tone will be heard. Ring or Voice Announce is normally determined by settings at the called station but you may change this by dialing '#' after placing the call. By changing the mode, a Voice Announce call will ring or a ringing ICM call will allow Voice Announce (toggle).

You can assign a Flex button for **Direct Station Selection/Busy Lamp Field (DSS/BLF)**. The DSS/BLF button allows you to call another station with the single of a button. The button LED will display the other station's status (ON=busy, OFF=idle).

When you go off-hook, you may connect to another station or system resource automatically. This **Prime Line Preference** may be immediate or delayed allowing you to take other actions during the delay. Otherwise, you may press another Flex button before going off-hook to override Prime Line Preference.

If you go off-hook and take no action, Intercom dial-tone will time-out, and after the **Howler tone** is received, your phone will be placed out-of-service in **Intercom Lock-Out**; you then must hang-up to return the phone to an idle state.

To place an Intercom call:

- Lift the handset,
- Dial the Intercom number of the desired station,
- When the call is answered or the Splash tone is heard, begin speaking with the called party.

4.1.1 Using Camp-On when calling a busy station

If the called party is busy, you may activate **Camp-On**, **Callback** or **Voice Over** at the station. **Camp-On** allows you to wait off-hook for the called station to answer. **Callback** allows you to hang-up, and when the busy station returns to an idle state, the system will call your Station; after you answer the callback, the system will call the previously busy station.

If you are the Attendant or Secretary, you may activate **Intrusion**. You may also use **Step Call**; dial the next station by dialing the last digit of the Intercom number.

To Camp-On (wait off-hook) for a busy station:

- Press * and await an answer.

To request a Callback (wait on-hook) for a busy station:

- Press the MSG button and hang-up.

To make a Voice Over announcement to a busy station:

- Dial #,
- After the Splash tone is heard, begin speaking.

4.1.2 Leaving a Message Wait

If the called user does not answer or is in DND mode, you may leave a **Message Wait**. The called user will receive a Message Wait indication; the message icon will be displayed in the LIP-8024E. If the ring/message LED is set to Message Wait Indication, the ring/message LED will flash.

To activate Message Waiting:

- Press the MSG button and hang-up.

4.2 External Calls

4.2.1 Placing external CO/VoIP calls

External calls are placed on CO/IP lines. These 'lines' are accessed either using a button on the iPECS Phone assigned as a **CO/IP line** or using dial codes. The CO/IP lines are grouped for different types of calls, local, long distance, etc. Using the **CO/IP line group** code, you will be able to access any line from the group. A Flex button on the iPECS Phone assigned as a LOOP button lets you access a line from a group. Dial codes for access to CO/IP lines are:
Individual CO/IP line access—

88 + Line number (01-10 for iPECS SBG-1000, 01-42 for iPECS-50 & 100, 001-200 for iPECS-300, 001-400 for iPECS-600, or 001-600 for iPECS-1200).

or

88 + Line number (01-80 for iPECS-MG100, or 001-240 for iPECS-MG300).

CO/IP Group access—

801-805 for iPECS SBG-1000, 801-820 for iPECS- 50 & 100, 801-872 for iPECS-300 & 600, or 8900`-89100 for iPECS-1200

or

801-824 for iPECS-MG100, or 801-872 for iPECS-MG300

Any CO/IP Line access—

9

When dialing on a CO line which uses pulse style signals, you may activate **Dial Pulse to Tone Switchover** changing to DTMF style dialing (for banking services, etc.).

When placing an IP call, you must dial an IP address using the '*' key in place of the dot.

If **Least Cost Routing** is set-up, the number you dial will be analyzed and the system will place the call on the least expensive route.

You may be assigned **Dialing** and/or **CO/IP Line Access Restrictions**, in which case you will receive error tone if you attempt to dial or access a restricted number/CO/IP line. **CO/IP line** and **Station Class Of Service (COS)**, which establish dialing restrictions, may vary during Day and Night operation (**Day/Night COS**).

You may need to enter an *Authorization code* before placing calls, in which case you will receive a second dial tone.

Your external calls may be subject to **Call Time Restrictions**, you will receive a **Call Warning Tone** prior to disconnect.

NOTE—In the event of an emergency, assigned Emergency numbers (ex., a 911 call) may be dialed from any station in the System, regardless of a Station's dialing restrictions (COS).

To place an external call:

- Lift the handset,
- Dial the CO/IP line/group,
- Dial the desired number.

4.2.2 Waiting for the next available CO/IP line

If all the lines connected to your system are busy, you will receive an All Trunks Busy signal. You may request to be notified when a line becomes free.

To activate a queue if the selected/dialed line is busy:

- Select the desired CO/IP line button; when the busy notification is returned, press the MSG button,
- Return to an idle state by going on-hook; when the line is available, the Station will be notified (ringing).

4.2.3 Account Codes: Tracking External calls for billing

In some cases, you or your company may desire to track calls for billing or other purposes. You may enter an **Account Code**, which is output from the system to a printer in the **SMDR** report. You may have an **Account Code** Flex button (refer to ***Assigning features to Flex buttons***).

In iPECS-LIK

To enter an Account Code before the call:

- Lift the handset,
- Press the assigned ACCOUNT CODE button,
- Dial the Account Code (1-12 digits),
- Press *, Intercom dial tone is heard,
- Place the CO/IP call as normal.

To enter an Account Code during a call:

- Press the assigned ACCOUNT CODE button,
- Dial the Account Code (1-12 digits),
- Press *.

In iPECS-MG

To enter an Account Code before the call:

- Lift the handset,
- Dial 550,
- Dial the Account Code (1-12 digits),
- Press *, Interncom dial tone is heard,
- Place the CO/IP call as normal.

4.2.4 Disable dialing from your phone

You can temporarily 'Lock' your phone by activating **Temporary COS**, which will disable all dialing from the phone. To deactivate **Temporary COS** you must enter the station's Authorization code.

To activate Temporary COS:

- Press TRANS/PGM,
- Dial 21(iPECS-LIK)/31(iPECS-MG) (User Program code),
- Dial your Authorization code(iPECS-MG),
- Press HOLD/SAVE.

To deactivate Temporary COS:

- Press TRANS/PGM,
- Dial 22(iPECS-LIK)/32(iPECS-MG) (User Program code),
- Dial your Authorization code,
- Press HOLD/SAVE.

4.2.5 Temporarily override dialing restrictions at a phone

Override the dialing restrictions at any phone by activating **Walking COS**. The **Walking COS** dialing restriction levels are applied for a single call only. For multiple calls, you will need to reactivate **Walking COS** or use the FLASH button to regain CO/IP dial-tone.

To activate Walking COS:

- Press TRANS/PGM,
- Dial 23(iPECS-LIK)/33(iPECS-MG) (User Program code),
- Dial your Authorization Code (station number and password),
- Dial '*' (iPECS-MG),
- Place call as normal.

4.3 Using Directory

4.3.1 Using Last Number Redial (LNR)

The last number dialed on an external call is automatically saved in the **Last Number Redial (LNR)** buffer. The iPECS Display Phone, the system will store the numbers dialed on the last 15(iPECS-LIK)/100(iPECS-MG) calls.

In iPECS-LIK & iPECS SBG-1000

To dial the Last Number for an external call:

- Lift the handset, and/or press the DIR Soft button,
- Press Speed Soft button,
- Dial *,
- Press the Navigation up and down buttons to select from the last 15 numbers dialed,
- Press the Send Soft button or HOLD/SAVE.

In iPECS-MG

To dial the Last Number for an external call:

- Lift the handset,
- Press Speed Soft button,
- Dial *,
- or
- press the LOG Soft button,
- Press the Navigation up and down buttons to select from the last 100 numbers dialed or received,
- Press the Send Soft button or HOLD/SAVE.

4.3.2 Using and Entering Saved Number Dial

You may store the last number dialed on an external call to the **Saved Number Dial** buffer for convenient dialing at a later time. The Saved number is stored until a new number is saved.

To place a call using Save Number Dial:

- Lift the handset, and/or press the DIR Soft button,
- Press Speed Soft button(iPECS-LIK & SBG)/Dial 1 for Station Speed(iPECS-MG),
- Dial #.

To store a number in the Save Number Dial:

- While on an outgoing external call, press the Save Soft button.

4.3.3 Using System Speed Dial Numbers

The iPECS SBG-1000 & Micro & 50 & 100 systems each have memory allocated for 800 **System Speed Dial** numbers (bins 200-999). The iPECS-300 system has memory allocated for 3000 **System Speed Dial** numbers (bins 2000-4999). The iPECS-600 system has memory allocated for 6000 **System Speed Dial** numbers (bins 2000-7999). The iPECS-1200 system has memory allocated for 12000 **System Speed Dial** numbers (bins 20000-31999). The iPECS-MG100 system has memory allocated for 1000 **System Speed Dial** numbers (bins 2000-2999). The iPECS-MG300 system has memory allocated for 2000 **System Speed Dial** numbers (bins 2000-3999).
You may, if allowed, use **System Speed Dial** to call frequently dialed numbers.
In some cases, these numbers are divided into groups called **System Speed Zone Groups**. In this case, you may access some numbers and not others and your dialing restrictions may be invoked.
Only an Attendant can assign **System Speed Dial** numbers.

To place a call using System Speed Dial:

- Lift the handset,
- Press the DIR Soft button,
- Press the speed button(iPECS-LIK & SBG)/Dial 2 for System Speed(iPECS-MG),
- Dial the desired System Speed Dial bin number (200-999 for iPECS SBG-1000 & Micro & 50 & 100, 2000-4999 for iPECS-300, 2000-7999 for iPECS-600, 20000-31999 for iPECS-12000, 2000-2999 for iPECs-MG100 , or 2000-3999 for iPECS-MG300).

4.3.4 Using and Entering Station Speed Dial Numbers

Each station in the iPECS SBG-1000 & 50 & 100 System is allocated memory for 20 **Station Speed Dial** numbers (bins 00-19) each up to 23 digits. The iPECS-300 & 600 & 1200 support 100 **Station Speed Dial** numbers (bins 000-099). The iPECS-MG 100 & 300 each support 50 **Station Speed Dial** numbers (bins 000-049). These numbers are entered at the user's station and may include several 'special' instructions. Special instructions and the corresponding button are:

PAUSE will momentarily stop dialing.

FLASH as 1st digit—Activate dial tone detect.

FLASH not as 1st digit—The system will generate a *flash on the CO line*.

MSG as 1st digit—Send digits as *ISDN Keypad Facility message*.

'*' as 1st digit—**Display Security,** the stored number will not be displayed when used.

'*****' not as 1st digit—**Dial Pulse to Tone Switchover**, the system will switch from pulse to tone dialing.

When entering a **Speed Dial**, a 16 character name may be associated with the number for *Dial by Name*.

Dial Pad button	Letter Type								
	Uppercase(ABC)				Lowercase(ABC)				Num
	Button depressions								
	1	2	3	4	1	2	3	4	1
1	@	:	/	<	@	:	/	<	1
2	A	B	C		a	b	c		2
3	D	E	F		d	e	f		3
4	G	H	I		g	h	i		4
5	J	K	L		j	k	l		5
6	M	N	O		m	n	o		6
7	P	Q	R	S	p	q	r	s	7
8	T	U	V		t	u	v		8
9	W	X	Y	Z	w	x	y	z	9
0	.	,	?	!	.	,	?	!	0
*	*				*				*
#	#				#				#

Character Entry Chart

To place a call using Station Speed Dial:

- Lift the handset, and/or press the DIR Soft button,
- Press the Speed Soft button(iPECS-LIK, & SBG)/Dial '1' for station speed(iPECS-MG),
- Dial the desired Station Speed Dial bin number (00-19 , 000-099 or 000-049).

To enter a Station Speed Dial number with CO Line and Name:

- Lift the handset, and/or press the DIR Soft button,
- Press the Speed Soft button(iPECS-LIK & SBG)/Dial '1' for station speed(iPECS-MG),
- Press the ADD Soft button,
- Dial the desired Station Speed Dial bin number,
- Select/dial the CO/IP line/group, (Skip this step in iPECS SBG-1000)
- Dial the desired number to be stored,
- Press HOLD/SAVE,
- Enter the associated name if desired, using the Character Entry Chart,
- Press HOLD/SAVE.

To assign a Station Speed Dial number directly to a Flex button:

- Press TRANS/PGM,
- Press the desired Flex button,
- Select the Tel Num Soft button(iPECS-LIK)/Dial '1' for Number(iPECS-MG),
- Select/dial the CO/IP line/group, (Skip this step in iPECS SBG-1000)
- Dial the desired number,
- Press HOLD/SAVE,
- Enter the associated name if desired, using the Character Entry chart(iPECS-LIK),
- Press HOLD/SAVE.

4.3.5 Using Dial by Name and Entering Your Name

Dial by Name employs three different Directories: Private directory (Station Speed dial), Public Directory (System Speed dial), or Intercom directory.
NOTE—To allow others to contact you via the Intercom directory, you must enter a name for your station (up to 12 characters).

Characters are entered with two keystrokes as in the chart below.

Q – 11 Z – 12 . – 13 1 – 10	A - 21 B - 22 C - 23 2 - 20	D - 31 E - 32 F - 33 3 - 30
G – 41 H - 42 I - 43 4 - 40	J - 51 K - 52 L - 53 5 - 50	M - 61 N - 62 O - 63 6 - 60
P - 71 R - 72 S - 73 Q - 7* 7 - 70	T - 81 U - 82 V - 83 8 - 80	W - 91 X - 92 Y - 93 Z - 9# 9 - 90
*1 - Blank *2 - : *3 - ,	0-00	#

Character Entry Chart

To place a call using Dial by Name:

- Press DIR Soft button,
- Dial the desired directory, 1: Private directory, 2: Public directory, 3: Intercom directory, the LCD will display the names in alphabetical order,
- Scroll using the Navigation up/down keys, or enter search characters (refer to the above Character Entry Chart).
- Press HOLD/SAVE to place the call.

To enter your station user name:

- Press the TRANS/PGM button,
- Dial 74(iPECS-LIK)/34(iPECS SBG-1000)/12(iPECS-MG) (Station User Name code),
- Enter the Name, up to 12 characters (press DND button to backspace/delete a character). To input characters:
- Press the second Soft button to select ABC> or abc> mode,
- To input the first character of a button, press the button 1 time (ex., for ‘a’, press 2 button once),
- To input the second character of a button, press the button 2 times (ex., for ‘b’, press the 2 button twice.
- To input the third character of a button, press the button 3 times (ex., for ‘f’, press the 3 button three times.
- Press HOLD/SAVE.

4.3.6 Using Automatic Called Number Redial (ACNR)

When making an external call and a busy signal is received, the system can be set to retry the number until the call is connected, the feature is cancelled, or the maximum number of retries is attempted—this is Automatic Called Number Redial (ACNR).
For each retry, the system will activate your speaker then place the call with the microphone muted. When the remote end answers, you must select the MUTE button, or lift the handset. Either of these actions will cancel the ACNR request as well as connect you to the remote party.

To set up ACNR, while on an outgoing call:

- Use the Navigation button to display the next menu and select the ACNR Soft button,
- Hang-up handset.

To cancel the ACNR request:

- Press the Stop Soft button.

5. Call Handling

5.1 Call Transfer: Sending a call to a different destination

You can send an active call to another station or other resource of the system, **Call Transfer**. You can screen the transfer with the receiving party (**Screened Call Transfer**) or complete the transfer without screening (**Unscreened Call Transfer**).
Transferred calls, internal or external, are place in **Transfer Hold**. These calls will receive Music on Hold (*MOH*) and will recall if not answered in a timely manner.
If an **Unscreened Transfer** call encounters an error or DND, it may immediately recall at your Station.
DSS/BLF buttons may be employed to transfer calls.

To Transfer an active call:

- Press TRANS/PGM,
- Call the transfer party,
- Unscreened Call Transfer- Hang-up,
- Screened Call Transfer– When call is answered or Splash tone is heard, announce the call and hang-up.

5.2 Call Hold: Placing a call in a waiting state

You may place an active Internal or External call in one of several holding states. In System Hold, other non-restricted stations may pick-up the call. In Exclusive Hold, only the holding station may pick-up the call.
The system is assigned a preferred hold type (System or Exclusive). You may override this **Hold Preference** by pressing the HOLD/SAVE button twice.
The LEDs for CO/IP line buttons flash at distinctive rates for the holding station and other iPECS Phone users.
There are also user operations such as pressing a DSS/BLF button that will place a call in **Automatic Hold**. Calls will remain in the held state for a period and then recall the user. This **Hold Recall** is provided with a different ring signal. If not answered in a timely manner, the Attendant will receive **Attendant Hold Recall**.

To place a call on Hold:

- Press HOLD/SAVE.

5.3 Broker Call: Switching between two calls

You may switch between the active call and a call on *Hold*, placing the active call on Hold acting as a broker between two or more parties, **Broker Call**. iPECS Phone users may 'broker' for multiple calls up to the number of **CO/IP line** buttons.

To switch between two calls (Broker Call):

- Press the desired **CO/IP line** button.

5.4 Joining Multiple People in a Conference

You can establish a **Conference** with up to 3 parties(iPECS-LIK)/13 parties(iPECS-MG), or 32 parties when using a Multi-Party Conference Interface Module (MCIM)(iPECS-LIK). The other parties in the **Conference** may be internal or external.
A **Conference** can be placed on Hold and is subject to *Hold Recall*.
You may also use the Conference operation to join 2 external parties in a private conversation. This is an **Unsupervised Conference**, which is not subject to the normal **Hold Recall** operation.

To establish a Conference:

- Establish call with one of the desired conference parties,
- Select the Conf Soft button,
- Establish call with the other conference party,
- Select the Conf Soft button,
- Select the Conf Soft button again to establish the conference.

To place a Conference on Hold:

- Press the HOLD/SAVE button.

To retrieve the Conference from Hold:

- Select the Conf Soft button.

To establish an Unsupervised Conference:

- Establish conference with two external parties,
- Select the Conf Soft button,
- Hand-up handset.

To retrieve an Unsupervised Conference:

- Lift the handset,
- Select the Conf Soft button.

5.4.1 Setting up a Conference Room

In addition to establishing a Conference, up to 9 **Conference Rooms** can be set up, letting up to 32 parties converse when using a MCIM. When setting up a Conference Room, a password can be designated for invited parties (internal and external parties) to use for accessing the established Conference Room.

In iPECS-LIK

To set-up a Conference Room:

- Press the TRANS/PGM button,
- Dial 53 to create a Conference Room,
- Dial the desired Conference Room number (1-9),
- If desired enter a password for the Conference Room (up to 12 digits),
- Press HOLD/SAVE to establish the Room.

To join a Conference Room:

- Lift the handset,
- Dial 59 (Conference Room entry code),
- Dial the Conference Room Number,
- Dial the Conference Room password.

To delete a Conference Room:

- Press the TRANS/PGM button,
- Dial 54 (Conference Room delete code),
- Dial the Conference Room number (1-9),
- Dial the Conference Room password,
- Press HOLD/SAVE to delete the Conference Room.

In iPECS-MG

To set-up a Conference Room:

- Press the TRANS/PGM button,
- Dial 54 to create a Conference Room,
- Dial the desired Conference Room number (571-579),
- If desired enter a password for the Conference Room (up to 12 digits),
- Press HOLD/SAVE to establish the Room.

To join a Conference Room:

- Lift the handset,
- Dial 571-579 (Conference Room entry code),
- Dial the Conference Room password.

To delete a Conference Room:

- Press the TRANS/PGM button,
- Dial 55 (Conference Room delete code),
- Dial the Conference Room number (571-579),
- Dial the Conference Room password,
- Press HOLD/SAVE to delete the Conference Room.

5.5 Call Park: Placing a call on Hold to Page

A user may transfer an active CO/IP call to a special holding location (Park Orbit), which can be accessed easily from any station in the system. Typically, this feature is used with *Paging* to notify the desired user of a parked call.
Parked calls are subject to *Hold Recall* after the Call Park timer.

In iPECS-LIK & iPECS SBG-1000

To park an active external call:

- Press TRANS/PGM,
- Dial the Park Orbit (601-610 for iPECS SBG-1000 & 50 & 100, 601-619 for iPECS-300 & 600 or 601-800 for iPECS-1200),
- Return to idle.

To retrieve a parked call:

- Lift the handset,
- Dial the Park Orbit.

In iPECS-MG

To park an active external call:

- Press TRANS/PGM,
- Dial the Park Orbit (541),
- Dial the Park number (00-49)
- Return to idle.

To retrieve a parked call:

- Lift the handset,
- Dial the Park Orbit (541),
- Dial the Park number (00-49)

5.6 Two-Way Record: Recording a call

You may record an active external conversation in your *Voice Mail Box*.

To activate Two-Way Record while on a CO/IP call:

- Use the Navigation button to display the next Menu and select the Record Soft button, record warning tone is heard and recording starts.

To stop Two-Way Record while on a CO/IP call:

- Use the Navigation button to display the next menu, and select the Record Soft button or,
- Hang-up, return to idle.

6. Send & Retrieve Messages

6.1 Responding to a Station Message Waiting Indication

Another station can leave a Station **Message Waiting** indication (MWI) when you do not answer or your phone is in *DND* mode. The message icon will be displayed on the LCD screen in LIP-8024E. If programmed, a flashing MSG LED on the iPECS Phone also will indicate when there is a Message Waiting. As a further notification, a **Message Wait Reminder Tone** can be provided. You may review and delete messages as well as respond with a call back.

To review your Station messages:

- Press the MSG button, the LCD shows the Message Summary display:

  1. ICM MWI(002)
  2. VSF MSG(002)
  3. VMS MSG(001)

  BACK OK
- Dial 1 to view Station messages,
- Press the navigation up/down button to scroll through the messages.

To return a call from the list of Intercom (MWI):

- Press the navigation up/down buttons to scroll through the Intercom messages,
- Press the OK Soft button to select and place the return call.

To delete a Station MWI:

- Press the navigation up/down buttons to scroll through the Station messages,
- Press the Delete Soft button to select,
- Dial 1 (Delete MWI).

To delete all Station MWIs:

- Press the Delete Soft button,
- Press 3 (Delete All MWIs).

6.2 Getting Voice Mail Messages

When callers are forwarded or recall to your Voice Mail Box, they can leave a voice message. Your Voice Mail Box is part of the integrated **VMIM/VSF/VMIB** module, the **iPECS Feature Server** or an external Voice Mail system.

The Voice Mail system allows access to and management of received voice messages. While in your Mail Box, you have control of your password and Mail Box greeting. In addition, you can remotely control Call Forward for your station from the VMIM/VSF/VMIB. You will need to register an *Authorization Code* for your station to access the VMIM/VSF/VMIB Voice messages.

To retrieve Voice Mail locally using a Flex button:

- Press the programmed VOICE MAIL Flex button,
- Dial your Mail Box number and corresponding password to receive the 'Number of Messages' prompt,
- Dial desired option codes,
- At completion of session, hang-up to return to idle.

To retrieve Voice Mail locally using the MSG button:

- Press the flashing MSG button, the LCD shows the Message Summary display:

```
1. ICM MWI(002)
2. VSF MSG(002)
3. VMS MSG(001)
 BACK          OK
```

- Press the Navigation down key, to display additional items:

```
4. UMS MSG(003)
5. ICM SMS(003)

 BACK          OK
```

- Dial 2 for VMIM/VSF, 3 for external VM or 4 for Feature Server Voice Mail,
- After the prompt enter your station number and password,
- Dial desired option codes,
- At completion of session, hang-up to return to idle.

To access your Voice Mail Box from a Remote Location:

- Lift the handset,
- Dial the telephone number of a *DISA* CO line answered by the VMIM/VSF/VMIB Auto Attendant,
- At answer,
- dial # to receive the 'Mail Box & Password' prompt(iPECS-LIK & SBG),
- Or
- dial 523 (VMIB Access Code)(iPECS-MG),
- Dial the Mail Box and password to receive the 'Number of Messages' prompt,
- Dial '*' (iPECS-MG),
- Dial desired option codes,
- At completion of session, hang-up.

6.3 Sending and Receiving Short Text Messages

You can exchange short text messages (up to 100 alphanumeric characters) with other iPECS display phone users. These messages will activate the message icon on the LCD (LIP-8024E). If the ring/message LED is set to Message Wait indication, the ring/message LED will flash.

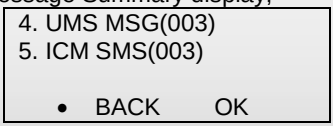
In iPECS-LIK

To send an SMS message to another iPECS display Phone:

- Press the TRANS/PGM button,
- Dial 36 (SMS send code),
- Dial 1 to resend an existing message, or 2 to send a new or edit an existing message,
- Enter the station range to receive the message, to send to a single station enter the station number twice,
- Dial your message using 2 key strokes for each character (refer to Character Entry Chart(iPECS-LIK) in ***Section 4.3.4***).
- Press HOLD/SAVE to send your message.

To view your received Short text messages:

- Press the MSG button, and press the Navigation down key four times (LIP-8012E) or three times (LIP-8024E), the LCD will display the Message Summary display,



- Dial 5; the first two (LIP-8012E) or three (LIP-8024E) SMS messages are shown in brief,
- Dial the Message number to view the entire SMS message.

To delete received Short text messages:

- Press the Delete Soft button,
- Dial 1 to Delete the message, 2 to Cancel, or 3 to Delete all received Short text messages.

In iPECS-MG

To send an SMS message to another iPECS display Phone:

- Press the TRANS/PGM button,
- Dial 43 (SMS send code),
- Dial the station number to receive the message,
- Press the Add Soft button to append the next station number and Dial the station number,
- Press the Finish Soft button,
- Enter your mssage (refer to Character Entry Chart(iPECS-MG) in ***Section 4.3.4***),
- Press HOLD/SAVE to send your message.

To view your received Short text messages:

- Press the Msg Soft button, the LCD will display the Message Summary display,

  MWI(00) VMS(00) SMS(01)
  ENTER (MWI:1, VMS:2, SMS:3)
  •

- Dial 3 to view the SMS message.
- Press the Next Soft button to view the next SMS message.

To delete received Short text messages:

- Press the Delete Soft button.

7. Remote System Access

7.1 Direct Inward System Access (DISA)

DISA (Direct Inward System Access) allows remote users to gain access to the system's resources (remote users may be required to enter an *Authorization Code*). The system will recognize remote user dialed inputs (call other stations, place calls over CO/IP lines, review voice mails, etc). The iPECS SBG-1000 system does not support normal DISA service, but supports call to the station and remote voice mail access when answering by a VSF auto attendant.

In iPECS SBG-1000

To call to the station remotely:

- Call the telephone number of a CO line assigned for answer by a VSF auto attendant,
- Upon answer, dial station number.

In iPECS-LIK, iPECS-MG

To access system resources remotely:

- Call the system's DISA facility,
- Await answer and dial your authorization code (station number and password),
- Dial "*" for end mark (iPECS-MG),
- Dial as needed for the desired system resource.

7.2 Mobile Phone Extension

When away from your desk or office you can place and receive iPECS calls on a registered mobile phone. You may need to activate the Mobile Phone Extension feature and assign the Mobile Phone number.
This feature is only effective with an ISDN/VOIP CO line.

In iPECS-LIK & iPECS SBG-1000

To register a mobile phone number: (iPECS-LIK)

- Press the TRANS/PGM button,
- Dial 37,
- Dial the mobile phone number,
- Press the HOLD/SAVE button.

To activate a registered mobile phone: (iPECS-LIK)

- Press the TRANS/PGM button,
- Dial 38,
- 1 to activate, 0 to deactivate,
- Press the HOLD/SAVE button.

To place a call from the mobile extension using the iPECS System:

- Dial the ISDN DID number of the station; the system will check the Caller ID and answer the call. The user then will receive intercom dial tone,
- Place internal or external iPECS call as normal.

To Transfer a call from the mobile extension using the iPECS:

- Dial "*" while on an iPECS call,
- Dial the desired extension, the call is transferred and the mobile phone returns to idle.

NOTE—The mobile may reconnect to the transfer call by pressing the # key.

In iPECS-MG

To register a mobile phone number:

- Press the TRANS/PGM button,
- Dial 51,
- Select Mobile Index 1 or 2,
- 1 to activate, 0 to deactivate,
- Press the HOLD/SAVE button.

To activate a registered mobile phone from the user's station:

- Press the TRANS/PGM button,
- Dial 52,
- Select Mobile Index 1 or 2,
- Dial the mobile phone number with CO Access code,
- Press the HOLD/SAVE button.

To place a call from the mobile extension using the iPECS System:

- Dial the ISDN DID number of the station; the system will check the Caller ID and answer the call. The user then will receive intercom dial tone,
- Place internal or external iPECS call as normal.

To Transfer a call from the mobile extension using the iPECS:

- Dial the mobile flash digit "*" while on an iPECS call,
- Dial the desired extension, the call is transferred and the mobile phone returns to idle.

NOTE—The mobile extension may reconnect to the transfer call by pressing the mobile flash digit(*).

8. Misc. Features

8.1 Call Log

Users can view a log of incoming, outgoing and missed calls on the display (up to 99 records). A LOG Soft button provides simple access to incoming (called), outgoing (dialed) and missed (lost) calls.
NOTE—if a call is missed, the **LOG** Soft button will be displayed as LOG(M); the missed call icon also will appear on the LCD (LIP-8024E).

To access the Call Log menu:

- Press the LOG Soft button,
- Using the Navigation up/down keys, to view items (Called, Dialed, or Lost),

- Log codes include:

◀– Incoming call
▶– Outgoing call
Missed call

To place a call using numbers stored in the Call Log:

- From the Call Log, use the Navigation up/down keys, to view items (Called, Dialed, or Lost),

- Highlight the desired item, and press the Send Soft button to place the call.

To save an external call to the Station Speed Dial:

- Use the Navigation up/down buttons to highlight the desired external call item,
- Press the Select Soft button,
- Press the Save Soft button.

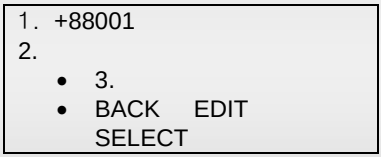
The CO code in a log item is used to seize the co line when placing an external call using the call log. Up to 5 CO codes can be saved.

The first CO code is sent from the system in the saved call log. Normally the first CO code is '9', but if the telephone number is equal to a number in the Speed Dial list, the first CO code will be the access code of the saved CO line of the speed dial. Therefore the first CO code of each call log can be different and is not be editable.
CO Codes 2 - 5 are the user-defined codes. If a code 2 - is selected, the selected code will be used in placing all of the external calls in the call log.

To select a CO Code:

- From the Call Log, use the right Navigation key, to advance to the next 3 Soft button items,

- Press the CO CODE Soft button (code displaying the + symbol is the currently selected item),
-



To edit the CO code (positions 2-5 only):

- Use Navigation up/down buttons to highlight the desired item,
- Press the Edit Soft button to modify selection.

To select the CO code:

- Use Navigation up/down buttons to highlight the desired item,
- Press the Select Soft button.

8.2 Contrast (iPECS-LIK)

LCD contrast can be adjusted to enhance viewing ability.

To change the LCD Contrast:

- While in an idle state, press the VOL ▲ ▼ buttons to adjust the brightness.
  ▲- increase (darker)
  ▼- decrease (brighter)

8.3 Background Music and Music on Hold (iPECS-LIK)

Two audio sources can be connected to the system. These sources or an internal source provide input for Background Music (BGM) and Music On Hold (MOH). In addition, a recorded message from the VMIM can be used. BGM is played over the speakers of the iPECS Phone when the station is idle. MOH is played to callers placed on *Hold*.

There are eleven possible selections for BGM and MOH:

00: Off
01: Source BGM1
02: Source BGM2
03: VSF MOH 1
04: SLT MOH 1
05: SLT MOH 2
06: SLT MOH 3
07: SLT MOH 4
08: SLT MOH 5
09: VSF MOH 2
10: VSF MOH 3

To turn on Background Music:

- Press HOLD/SAVE to cycle through the BGM selections.

8.4 Using Internal, External and Meet-Me Paging

The User can broadcast announcements to other stations and/or external speakers. Stations are assigned to one or more of the **Internal Page Zones**. The system has two **External Page Zones** that can be connected to external speakers.

In iPECS-LIK, Page Zone codes are:

Internal Page Zones	501-510 (iPECS SBG-1000 & 50 & 100), 501-535 (iPECS-300 & 600), 301-400 (iPECS-1200)
Internal All Call Page	543
External Page Zones	545-546
External All Call Page	548
All Call Page	549

In iPECS-MG, Page Zone codes are:

Internal Page Zones :	
	543 + Zone No(01~15) (iPECS-MG100)
	543 + Zone No(01~30) (iPECS-MG300)
Internal All Call Page	543 + 00
External Page Zones	548
All Call Page	549

If the desired Page Zone is busy, the User can elect to be recalled when their turn comes in the queue. Users can also request a paged party answer the Page using **Meet-Me Paging**. In this case, the paged party may answer the page from any phone in the system by dialing the Meet-Me code.

To make a page:

- Lift the handset,
- Dial the desired Page zone,
- If assigned, after page warning tone, make announcement.

To queue for a page when busy is received(iPECS-LIK & SBG):

- Press the MSG button,
- Replace the handset returning to idle.

To answer a Meet-me-Page:

- Lift the handset.
- Dial 544(iPECS-LIK)/511(iPECS SBG-1000)/546(iPECS-MG) (Meet-Me-Page code).

8.5 Push-To-Talk (PTT) Page

iPECS Phones can be assigned as a member of one or more of the system's nine Push-To-Talk (PTT) page groups. Users separately log-in or log-out of any one or all PTT groups to which the phone is assigned. Once logged in, place or receive one-way page announcements to/from other users who are logged in to the same PTT group.

To log-in to a PTT group:

- Dial #0(iPECS-LIK)/538(iPECS-MG),
- Dial the desired PTT group number (1-9 or 0 for all groups),

To log-out of the PTT group(s):

- Dial #0(iPECS-LIK)/538(iPECS-MG), the PTT Log-in/out code,
- Press the * key.

To place a page announcement to the active PTT group:

- Press and hold the PTT Flex button,
- After confirmation tone, make page announcement.

8.6 Wake-Up Alarm

iPECS supports an Alarm clock for each station in the system. The alarm clock can be set to repeat daily or as a one-time alarm.
When responding to the alarm by lifting the handset, BGM or Wake-Up Alarm announcement (iPECS-LIK & iPECS SBG-1000) will be provided.

To set the Wake Up Alarm clock:

- Press TRANS/PGM,
- Dial **41**(iPECS-LIK)**/21**(iPECS SBG-1000)/**13**(iPECS-MG) (Alarm Clock code),
- Dial 2-digit hour and minute for alerting,
- For a daily (repeating alarm), press #,
- Press HOLD/SAVE.

To erase Wake-Up:

- Press TRANS/PGM,
- Dial **42**(iPECS-LIK)**/22**(iPECS SBG-1000)/**14**(iPECS-MG) (Alarm Clock delete code),
- Press HOLD/SAVE.

8.7 Alarm/Door Bell

The system can monitor external **Alarm** or **Door Bell** contacts:
Alarm Monitor—should the external contact activate, a unique Alarm Ring signal and LCD display may be received. To restart the monitor circuit, the external contacts must be deactivated and the Alarm Ring signal terminated.
Door Bell—a unique Door Bell Ring (single tone burst) may be received each time the external contact is activated. A system contact also can be assigned to act as a **Door Open** contact.

To terminate the Alarm signal:

- Dial 565(iPECS-LIK & MG)/65(iPECS SBG-1000) (Alarm Stop code).

To activate the Door Open contacts:

- Lift the handset,
- Dial Door Open code, #* and contact number 1-4.

NOTE—Contacts 3 & 4 are only available in the iPECS-300 & 600. Contacts 1 is available in the iPECS -MG.

8.8 Power Fail Transfer (PFT)

When AC power to the system fails, back-up operation may be provided with back-up batteries or **Power Fail Transfer (PFT)**. When battery back-up is provided the station will operate normally. When **PFT** is implemented, an SLT is connected to a CO line by the system. This SLT can be used as any normal SLT, providing service while power is out.

8.9 System Voice Memo

The integrated Voice Mail modules incorporate several **Voice Memos** to provide Station Users with general information such as station number, date, time, and feature status. Voice Memos are heard over the iPECS Phone speaker and over the handset for SLTs.
For the **Station Status Memo**, the following items are reported:

ICM Signaling Mode (Handsfree/Tone/Privacy)

Station IP Address

Station Mac Address

Number of messages x (x: number of all message waiting)

Wake-Up Time (hh:mm)

Do Not Disturb

Forwarded to station xxx

Forwarded to speed bin xxx

Queued CO/IP line xxx

Locked (Temporary COS)

COS x

To hear Date & Time memo:

- Dial the Voice Memo code (661 for iPECS-50 & 100, *661 for iPECS-300 & 600 & 1200, or 675+1 for iPECS-MG),
- Date and Time memo is heard, “Date is May 2nd.Time is xx:xx pm”.

To hear Station Number Prompt:

- Dial Voice Memo code (662 for iPECS-50 & 100, *662 for iPECS-300 & 600 & 1200, or 675+2 for iPECS-MG),
- The Station Number memo is heard, “This is station 150”.

To hear Station Settings:

- Dial Voice Memo code (663 for iPECS-50 & 100, *663 for iPECS-300 & 600 & 1200, or 675+3 for iPECS-MG),
- Station Status Memo is heard.

NOTE—only activated features are announced.

8.10 Hot Desk

iPECS phones in the system may be assigned for **Hot Desk** operation. These Hot Desk phones let you log-on and use the Hot Desk phone as if it were your station.

Once logged-on, the Hot Desk station will take on the attributes assigned to your station number and you can make calls as normal. When logged-out, calls to your station number are forwarded to the chosen destination.

In iPECS-LIK

To Log on to a Hot Desk station:

- Press the TRANS/PGM button,
- Dial *0,
- Dial your Authorization Code (Station Number and Password).

To Log out of the Hot Desk station:

- Press the TRANS/PGM button,
- Dial * twice,
- Use the VOL ▲ ▼ buttons to select a call forward destination for your calls, speed dial, joined mobile phone, VMIM/VSF, or VM group,
- Press the HOLD/SAVE button.

In iPECS-MG

To Log on to a Hot Desk station:

- Lift the handset,
- Dial 525
- Dial your Authorization Code (Station Number and Password).

To Log out of the Hot Desk station:

- Press the TRANS/PGM button,
- Dial 525,
- Input Call forward destination number optionally
- Press the HOLD/SAVE button.

9. PBX, Centrex & ISDN

9.1 Access PBX or Centrex features

The iPECS has been designed to operate with a host PBX system or Centrex services from your service provider. The iPECS connects to a host with analog CO lines.

When accessing a CO line, the phone will act as an extension of the host, allowing access to the host system features using the host dial codes. While on a call, use the iPECS **Flash** feature to transfer calls to other host extensions or access features of the host. The Flash feature may be used on other CO lines to regain dial tone from the CO line without relinquishing control of the CO line to place another call.

To access PBX or Centrex features while idle:

- Lift the handset,
- Select/dial access a PBX/Centrex CO line,
- Dial PBX/Centrex feature code.

To access PBX/Centrex features while on a PBX/Centrex CO line:

- Use the Navigation button to display the next menu, and select the Flash soft button,
- After receiving new dial tone, dial the PBX/Centrex feature code.

9.2 Access the ISDN Network

9.2.1 Using the Keypad facility to access ISDN features

Access to certain features of your ISDN services requires that dialed digits be sent to the ISDN as data and not tones. In this case, dialed digits are sent as 'Keypad messages'.

A Keypad Facility button must be assigned using the *Flex Button program* procedures. Once active, dial into the ISDN for services; however, actions other than dialing will deactivate the Keypad Facility operation.

To activate Keypad Facility operation:

- Press the KEYPAD FACILITY button to switch to keypad mode,
- Dial as desired.

To deactivate Keypad Facility operation:

- Press KEYPAD FACILITY,
  OR
- Press a Feature or Flex button.

9.2.2 Using ISDN Supplementary Services

ISDN service providers may incorporate features similar to those of Centrex. These ISDN Supplementary services are provided on a subscription basis, and as with Centrex, are accessed using the *Flash* button on an iPECS phone.
Using supplementary services an ISDN line can be placed on Hold and a second call placed on the line. You may then alternate between the two held calls (Broker Call) using the hold button. An ISDN line conference can be established using the Flash and Conf Soft buttons. A conference can also be placed on hold.

While on an ISDN CO line, to access ISDN Supplementary services:

- Press Flash,
- Press HOLD/SAVE, Conf, or **CO line** button to activate the desired feature.

9.2.3 Activating ISDN Caller ID Restriction

iPECS Phone users can restrict the transmission of Caller ID to the far-end. This may be a subscription service of your carrier. Separate Flex buttons are required to activate outgoing, Connected Line (COL), and incoming, Calling Line ID (CLID) restriction.

To restrict Caller ID:

- Lift the handset,
- Press programmed CLIR/COLR button to place call.

10. Features & Flex Buttons

10.1Entering Station Program Data

A special code set is available for iPECS Phone users to assign certain attributes such as Authorization Codes (Passwords). After entering the **User Program** mode, dial the codes to select the attribute and setting. Once selected, the setting is saved. A list of the User Program codes, the feature/function and any input required are given in *Appendix B*. In some cases, you enter these codes as part of Flex button assignments.

To assign user programmable attributes to your station:

- Press TRANS/PGM,
- Dial desired User Program codes shown in *Appendix B*,
- Press HOLD/SAVE.

10.2 Assigning Features to Flex Buttons

You may assign features and functions to the Flex buttons on your iPECS Phone (possibly CO/IP lines). Flex buttons may be assigned for most features providing **One-Touch** feature activation (ex., a Flex button may be assigned to access the *Account Code* feature and may include the Account code digits). Features that may be assigned to a Flex button include:
DSS/BLF—Enter station number.

Speed Dial—Enter Station/System Speed dial bin.

Flex Numbering Plan—Enter Flex Numbering Plan code (refer to *Appendix A*).

User Program Code—Press TRANS/PGM and enter a User Program code (refer to *Appendix B*).

CO/IP Line—Enter the CO/IP line or group number.

To assign a feature to a Flex button:

- Press TRANS/PGM,
- Press the desired Flex button,
- Dial desired code and required inputs; for User Program codes ***Appendix B***), first press the TRANS/PGM,
- Press HOLD/SAVE.

APPENDIX A FLEXIBLE NUMBERING PLAN

In iPECS-LIK & iPECS SBG-1000

Feature	iPECS -50	iPECS -100	iPECS -300	iPECS -600	iPECS -1200	iPECS SBG-1000
Intercom Call	100 - 149	100 - 169	100 - 399	1000 - 1599	1000 - 2199	10-33
CO/IP Group Access	801 – 820	801 - 820	801 - 872	801 - 872	89001 - 89200	801 - 805
Individual CO/IP Line Access	8801 – 8842	8801 – 8842	88001 – 88200	88001 – 88400	88001 – 88600	8801 – 8810
Group Pilot Number	620 – 659	620 - 659	620 - 667	620 - 667	401 - 500	620 – 631
Internal Page Zone	501 - 510	501 - 510	501 - 535	501 - 535	301 - 400	501-510
Call Parking Locations	601 – 610	601-610	601 - 619	601 - 619	601 - 800	601 – 610
Station User VMIM/VSF Features	66	66	*66	*66	*66	
Door Open	#*1	#*1 - #*2	#*1 - #*4	#*1 - #*4	#*1 - #*4	#*

Feature	iPECS-LIK	iPECS SBG-1000	Remark
Internal All Call Page	543		
Meet Me Page	544	511	
External Page Zone 1-2	545 - 546		
External All Call Page	548		
All Call Page (Internal/External)	549	500	
SMDR Account Code Enter	550		SLT use only
Flash Command to CO Line	551		SLT use only
Last Number Redial	552	52	SLT use only
DND	553	53	SLT use only; Toggle ON/OFF
Call Forward	554	54	
Speed Dial Programming	555	55	SLT use only
Message Wait/Callback Enable	556	56	SLT use only
Message Wait/Callback Return	557	57	SLT use only
Speed Dial Access	558	58	SLT use only
Cancel DND/FWD	559	59	SLT use only

Feature	iPECS-LIK	iPECS SBG-1000	Remark
CO System Hold	560	67	SLT use only
Program Mode Access	561		SLT use only
Attendant Unavailable	562		
Alarm Reset	565	65	
Group Call Pickup	566	**	
Universal Answer	567		
Account Code with bin	568		
Walking COS Code	569		
ACD Supervisor On/Off Duty	571		
ACD Supervisor Login	572		
ACD Supervisor Logout	573		
ACD Help Code	574		
ACD Calls In Queue Display	575		
ACD Supervisor Status Display	576		
ACD Supervisor Monitor	577		
ACD Reroute Queued Call w/answer	578		
ACD Reroute Queued Call w/o answer	579		
Enter Conference Room	59		
Camp-On Answer	600	66	SLT use only
Call Coverage button	67	*#	
Direct Call Pickup	7	7	
Retrieve Last Held CO/IP	8*	8*	
Retrieve Individual Held CO/IP	8#	8#	
Access CO Line in the 1st Available CO Group	9	9	
Attendant Call	0	0	
VM Message Wait Enabled	*8		
VM Message Wait Disable	*9		
MCID Request	*0		
Unsupervised Conference extend code	##		
PTT Group Login/Logout	#0		

In iPECS-MG

1) Basic Number

No	Name	Code	Remark
1	Station Number	100 ~ 4xx	
2	CO Group Access Code	9, 801 ~ 872(MG-300) 801 ~ 824(MG-100)	
3	Station Group Number	620 ~ 669(MG-300) 620 ~ 639(MG-100)	

2) Feature Code

No	Feature Name	Code	Remark
1	Attendant Call	0	
2	Conference Room 1	571	
3	Conference Room 2	572	
4	Conference Room 3	573	
5	Conference Room 4	574	
6	Conference Room 5	575	
7	Conference Room 6	576	
8	Conference Room 7	577	
9	Conference Room 8	578	
10	Conference Room 9	579	
11	Internal Page	543	543 + 00, xx 00: All Call Page Xx: Page Group #
12	Personal VM Page	544	
13	Announcement Page For Attendant	545	
14	Page Auto Answer	546	
15	Internal Page Answer (Meet-Me Page)	547	
16	External Page	548	
17	Internal-External Page All	549	
18	Call Forward Register	554	554 + Type + Destination
19	Pilot Hunt Call Forward Register	514	514 + Type + Destination

No	Feature Name	Code	Remark
20	Pilot Hunt Call Forward Cancel	515	
21	DND Status Change	516	
22	DND Delete	517	
23	Account Code	550	
24	CO Flash	551	
25	Last Number Redial	552	
26	Station Speed PGM	553	
27	Speed Dial	555	
28	MWI Register	557	
29	MWI Answer	558	
30	MWI Cancel	559	
31	Call Back Register	518	
32	Call Back Cancel	519	
33	Group Call Pickup	564	
34	Direct Call Pickup	7	
35	Walking COS	520	
36	Call Parking Location	541	541 + xx Xx: Parking Location (00 ~ 49)
37	PGM Mode Access	521	
38	Two-Way Record	522	
39	VMIB Access	523	
40	AME Access	524	
41	CO Line Access	88	88 + xxx Xxx: CO Line # (001 ~ 200 : MG-300 01 ~ 80 : MG-100)
42	VM MWI Enable	*8	
43	VM MWI Cancel	*9	
44	MCID Request	*0	
45	Unsupervised Conf Extend	5##	
46	PTT Group Access	524	524 + (0~9,*) 0 ~ 9: PTT Group #

No	Feature Name	Code	Remark
			*: Log out
47	Hot Desk Log In/Log out	525	
48	Name Register	526	
49	Create Conf Room	527	527 + Conf. Room #
50	Delete Conf Room	528	528 + Conf. Room #
51	Wake Up Register	529	529 + HH:MM
52	Wake Up Cancel	530	
53	Temporarily COS Down	531	
54	Cancel Temp COS Down	532	
55	Password Change	533	
56	Inter-Phone Group Access	534	
57	Call Wait Request	535	
58	Preselected MSG PGM	536	
59	Forced Handsfree Call	537	
60	Call Based CLIR	582	
61	CLIR Access	583	
62	COLR Access	584	
63	Pilot Hunt Call	585	
64	Command Call Oneway	581	
65	Command Call Conf	580	
66	Intrude Register	589	
67	Camp On Register	590	
68	OHVO Register	591	
69	Mobile Num Register	592	
70	Mobile CLI Register	593	
71	Mobile Access	594	
72	CCR Access	670	
73	CCR Access And Drop	671	
74	System Hold	560	
75	Return Held CO	8**	
76	Sys Memo	675	
77	DISA Tone Service	678	
78	All Feature Cancel	679	
79	Add Conf Member	680	

No	Feature Name	Code	Remark
80	System Alarm Reset	565	
81	Fault Alarm Reset	566	
82	Door Open	#*1	
83	Keypad Facility	##*	
84	T-Net Log-In/Out	586	
85	Universal Answer	587	
86	USB Call Record	588	
87	Delete All VM Message	681	
88	VM Page Message Record	682	
89	Direct VM Transfer	683	
90	Loop Key	684	
91	Call Log	685	

APPENDIX B USER PROGRAM CODES

In iPECS-LIK

CODE	FUNCTION	REMARK
10	Enblock Mode Dialing	iPECS LIP-7000 only
11 x	*Differential Ring, Intercom*	Select Ring Tone 1-8
12 x	*Differential Ring, CO/IP line*	Select Ring Tone 1-8
13 x	*Intercom Answer Mode*	Select ICM Signal mode, 1: HF, 2: TONE, 3: Privacy
14 x	*Call Coverage Attribute Setting*	1+: ON/OFF, 2+: ring delay (0-9)
15 x	*Station Ring Download*	Select download Ring Tone 0-9
19	Ear&Mic Headset Usage	iPECS LIP-7000 only
21	*Knock Down Station COS*	
22	*Restore Station COS*	May require Authorization code
23	*Walking COS*	May require Authorization code
30	VM Mobile Notify	
31	*Station Message Wait Retrieve*	
32	*CLI/IP Message Wait Retrieve*	
33 x	Authorization Code (Password) Entry	Station number +up to 12 digits, no Flex button
34	Assign DID CALL WAIT Button	
35	Message Wait in Executive/Secretary pair	
36	*Send SMS Message*	
37	*Register Mobile Extension*	
38	*Activate Mobile Extension*	
39	Register Mobile Ext. CLI	
41 xx	*Set Wake-Up Time*	Input time, 24 hour clock
42	*Erase Wake-Up Time*	
51 xx	*Custom/Pre-defined Message Display*	Select Message 00-20
52 xx	*Register Custom Message*	Input up to 24 characters
53 x	*Create Conference Room*	Input Conf Room (1-9) & password
54 x	*Delete Conference Room*	Input Conf Room (1-9) & optional password
55	Monitor Conf. Room	
61 x	*Headset/Speakerphone Mode*	
62 x	Headset Ring Mode	1: Speakerphone, 2: Headset, 3: both
71	LCD Display Mode	
72	Version Display	

CODE	FUNCTION	REMARK
73	*Background Music*	
74 x	*Station User Name Registration*	Input up to 7 characters
75	Display Phone IP Address	
76	Change Phone IP Address	
77	Display Phone MAC IP Address	
78	Network Configuration	
79	Display Phone Version	
80	Assign RECORD Button	Requires VSF/External SMDI VM
81	Assign ISDN CLIR Button	
82	ISDN COLR Button	
84	Assign ACCOUNT CODE Button	
85	Assign LOOP Button	
86	Assign ATD INTRUSION Button	
87	ICM Button	
88	Assign CAMP-ON Button	
89	Assign KEYPAD FACILITY Button	
8#	Assign OHVO Button	
90	SPEED Button Assignment	iPECS LIP-7000 only
91	CONF Button Assignment	iPECS LIP-7000 only
92	CALL BACK Button Assignment	iPECS LIP-7000 only
93	DND Button Assignment	iPECS LIP-7000 only
94	FLASH Button Assignment	iPECS LIP-7000 only
95	MUTE Button Assignment	iPECS LIP-7000 only
96	MONITOR Button Assignment	iPECS LIP-7000 only
97	REDIAL Button Assignment	iPECS LIP-7000 only
98	FWD Button Assignment	iPECS LIP-7000 only
99	*Assign PTT Button*	
*0	*Hot Desk Login Code*	
**	*Hot Desk Log out Code*	
*7	Force Fwd to Dest.	
*8	Register Bluetooth	
*9	Bluetooth Usage	

In iPECS SBG-1000

Code	Function	Remarks
11	Intercom Answer Mode	Select ICM Signal mode, 1: HF, 2: TONE, 3: Privacy
12	Headset/Speakerphone Mode	0:Headset, 1:Speaker
13	Select Headset Ring Type	1: Speakerphone, 2: Headset, 3: both

Code	Function	Remarks
21	Set Wake-Up Time	Input time, 24 hour clock
22	Erase Wake-Up Time	
31	LCD Display Language	
32	SBG Version Display	
33	Background Music	
34	Station User Name Registration	Input up to 12 characters
35	Display Phone IP Address	May require Authorization code
36	Display Phone MAC IP Address	
37	Display Phone Version	
38	Network Configuration	
41	Forced FWD to Destination	
42	Call Log Display	
43	CLIR Service	
44	COLR Service	
4*	Assign LOOP Button	
50	Assign CALL BACK Button	
51	Assign CONF Button	
52	Assign MUTE Button	
53	Assign ICM Button	
53	Assign REDIAL Button	

In iPECS-MG

Code	**Function**	**Remarks**
11	Intercom Answer Mode	1:H, 2:T, 3:P
12 + Name	User name creation	2 digit for each character
13 + Time	Set wake-up alarm time	HH/mm, 24-hour clock
14	Cancel Wake-up Alarm	
15	Set language for the display	00-14
16	LCD Date Mode Change	DD/MM/YY or MMDDYY
17	LCD Time Mode Change	12 Hour/24 Hour
18	Set Backlight	0-2
21	ICM Ring Type	
22	TRK Ring Type	
23	Ring Download	LIP-Series Only
24	Back Ground Music	
31	Temporary COS	Auth. Code required
32	Retrieve COS	Auth. Code required

Code	Function	Remarks
33	COS Override (Walking COS)	Auth. Code required
34	Register Password	
35	Call Log Protect	
36	SMS Message Protect	LIP-Series/LDP6000-Series
41 + MSG number [xx]	Set Pre-defined Message.	0-9, MSG *: User Custom # Deactivation
42	Create a Station User Message	
43	Send SMS Message	LIP Series/LDP6000 Series
44	Receive SMS Message	LIP Series/LDP6000 Series
51 + x	Activate a mobile phone	X=1-2
52 + x	Register the mobile number	X=1-2
53 + x	Register the mobile CLI number	X=1-2
54 + Rm & Auth Code	Start a Conf Room	
55 + Rm & Auth Code	Close a Conf Room	
61	Speaker/Headset Mode	Speak/Headset/E-MIC
62	Headset Ring Mode	Speaker/Headset/Both
71	Register Station ICLID	
72	View Station ICLID	
81	View IP Address	IP Gigabit Phone/ DTIM/SLTM
82	View Mac Address	IP Gigabit Phone/ DTIM/SLTM
83	View IP Phone version	
80	Network Setting	LIP Series
91	System Version	
92	System IP Address	

Appendix C Useful Information : Open Source Software Notice

Open Source Software Notice

This following GPL (General Public License) software used in this product are subject to the GPL License Agreements.
You can obtain a copy of the GPL licenses from Ericsson-LG Web Site (http://www.ericssonlg.com).

GPL License:

4. **u-boot**
5. **bash**
6. **linux**
7. **busybox**
8. **Alsa Libraries**
9. **udhcpc**
10. **ortp**
11. **Curl / LibCurl**
12. **libsrtp**
13. **Expat xml parser**

Ericsson-LG offers to provide source code to you on CD-ROM for a charge covering the cost of performing such distribution, such as the cost of media, shipping and handling upon e-mail request to Ericsson-LG at. : opensource@ericssonlg.com.
This offer is valid for a period of three (3) years from the date of the distribution of this product by Ericsson-LG.

iPECS

LIP-8040E

User Guide

Please read this manual carefully before operating Phone. Retain it for future reference

iPECS is an Ericcson-LG Brand

ERICSSON LG

Revision History

Issue	Date	Remark
1.0	Mar. 2012	Initial Release
1.1	Oct. 2012	Changed CI to Ericsson-LG

Disposal of your old appliance

1. When the crossed-out wheeled bin symbol is attached to a product, it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by government or the local authorities.
The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

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Important Safety Information

To prevent unexpected danger or damage please read this information before installing or attempting to repair you phone. Warning and Caution information is provided to alert the consumer of known dangers:

Warning: To reduce the possibility of electric shock, do not expose your phone to high humidity areas, such as a bathroom, swimming area, etc.

Caution: Use only Ericsson-LG approved batteries and desktop chargers to avoid the damage to the phone. Using other batteries or chargers voids your warranty and may cause an explosion.

Warning

1. Only trained and qualified service personnel shall install, replace or service the phone.
2. Do not spill liquid life water on the phone. If so, call the service center as this may result in fire or electric shock.
3. If you see smoke or smell something during use, unplug the power cord and the phone line. Call the service center immediately.
4. If the power adapter is used, do not touch the plug with wet hands. This may result in a fire or an electric shock or equipment damage.
5. Do not use the phone during a thunderstorm. Lightning strike may result in fire, severe electrical or acoustic shock.
6. Do not use the power adapter if the power cord or wall outlet is damaged. This may result in fire or an electric shock.

Caution

1. Ensure that children do not pull on phone cords. This may injure children or result in equipment damage.
2. The ear-piece houses a magnetic device which may attract pins or small metal objects. Keep headset clear of such objects and check before use.
3. Avoid placing the phone in an area that is excessively dusty, damp or subject to vibration.
4. Choose a site for the phone that is well-ventilated and dry.
5. Do not plug multiple plug-packs into one power outlet. This may result in the plug overheating and may result in a fire or plug pack failure.
6. Do not put heavy things on the phone.
7. Do not drop or throw the phone.
8. Static electricity discharge will damage electronic components.
9. Keep out of direct sunlight and away from heat.
10. No user-serviceable parts inside. Do not insert a screwdriver or any metal objects into the phone. This may cause electric shock or damage the equipment and will render the warranty void.
11. Clean the phone with a soft, dry cloth only. Do not use volatile liquids such as petrol, alcohol, or acetone as this may cause a fire or result in discoloration or damage to plastics. Do not clean with wax or silicon products as these may enter the equipment and cause operation to become unstable.

[EU]

European Union Declarations of Conformity

Ericsson-LG Co., Ltd. declare that the equipment specified in this document bearing the " CE" mark conforms to the European Union Radio and Telecommunications Terminal Equipment Directive(R&TTE 1999/5/EC), including the Electromagnetic Compatibility Directive(2004/108/EC) and Low Voltage Directive(2006/95/EC).
Copies of these Declarations of Conformity (DoCs) can be obtained by contacting your local sales representative.

[USA/CSA]

FCC/IC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 /RSS-GEN of the FCC/IC rules. Operation is subject to the following two conditions:
(1)This device may not cause harmful interference; and (2) This device must accept any interference received, including interference that may cause undesired operation.
This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.
The use of this device in a system operating either partially or completely outdoors may require the user to obtain a license for the system according to the Canadian regulations.

CAUTION : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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1. Introduction

1.1 General

Your telephone is connected to an advanced-technology, highly-versatile, fully-featured telecom system designed to make office communications easy and productive. Employing state-of-the-art Voice over Internet Protocol (VoIP) technology, voice and data converge on a single IP packet network. Because each iPECS Phone is an IP appliance, it can be moved easily throughout the office LAN and maintain normal operation.

1.2 Feature Information

We have taken every effort to make this user guide simple and straightforward. The guide starts with the simpler operations of the iPECS Phone Speakerphone, moves on to receiving and placing calls, and then to more advanced features. Each section includes a brief and basic description of each feature and step-by-step operation instructions.

The operations shown in this guide use the System's base default Numbering Plan. Your specific Numbering Plan may be different. Some features may not be available for you to access or may be subject to certain limitations based on the set-up of the System (refer to your System Administrator, or the iPECS Technical Manuals for further information).

NOTE—Under certain operating conditions, this equipment may not be able to make emergency calls. Alternative arrangements should be made for access to emergency services.

1.3 Feature Groupings

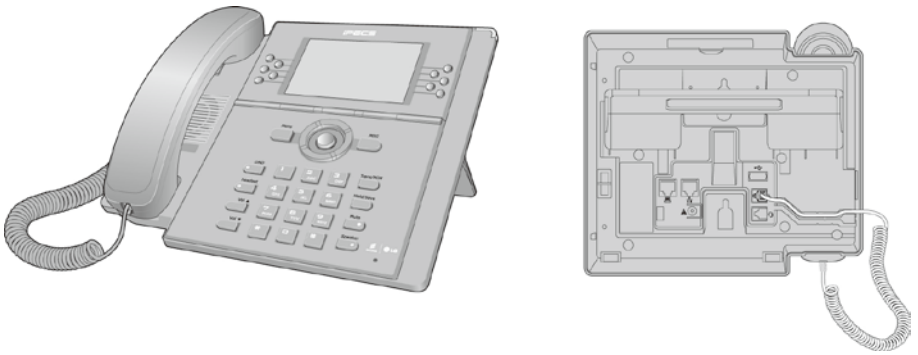
Every effort has been taken to divide the features into a logical and consistent sequence so that features can be quickly located.

Features have been divided into groups, *Receiving Calls*, *Placing Calls*, etc. Within each group, features are arranged according to the difficulty of operation and frequency of use.

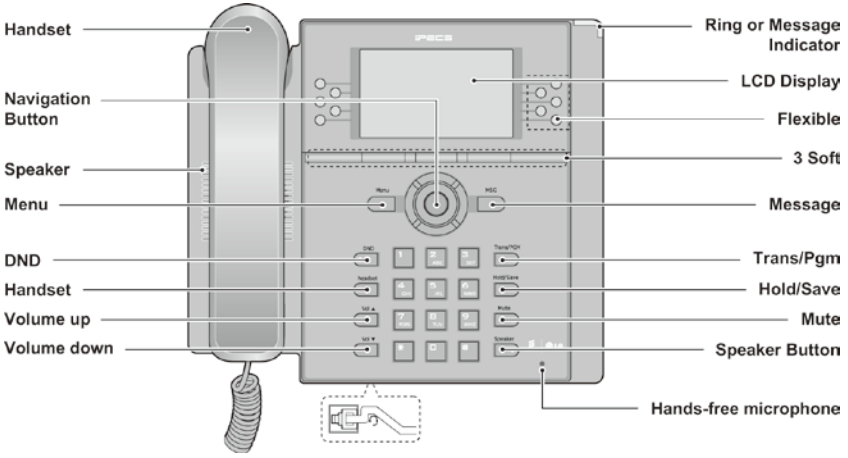
1.4 iPECS LIP-8040E Gigabit Phone Description

The iPECS LIP-8040E Gigabit Phone (shown) incorporate the latest in VoIP technology and user interface to provide you with a cost effective, simple to use, productive communications tool. It includes a large 9-line 24-character per line LCD (refer to Phone Diagrams, next page). The bottom line of the display incorporates an interactive menu accessed with the 3 Soft buttons just below the display. The Navigation button in the lower center of the Phone allows you to move through the menu choices when more than three selections are available.

Features and functions of your iPECS are accessed either using the Fixed or Flexible buttons or by selecting a menu item using the Soft buttons. In the remainder of this User Guide, the Fixed or Flexible buttons are shown with a box surrounding the BUTTON designation while Soft button menu selections are shown with a double underline.



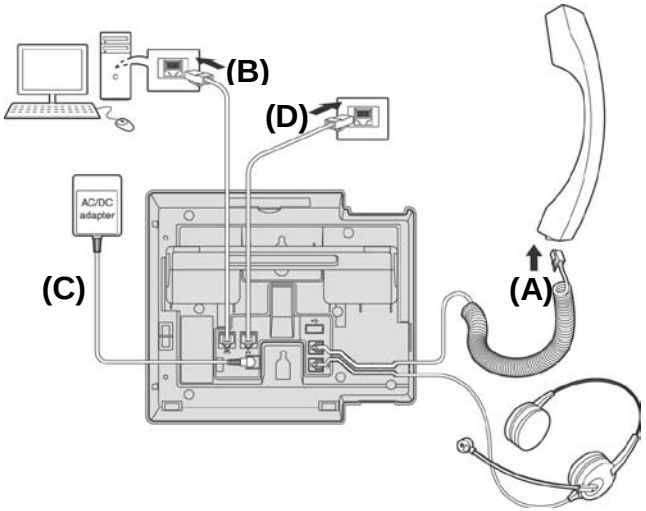
LIP-8040E Gigabit Phone Front and Back View



LIP-8040E Gigabit Phone Diagram

1.5 LIP-8040E Gigabit Phone Installation

The phone handset is attached as shown (A). The LIP-8040E has 2 RJ-45 and 10/100 Base-T LAN connection ports (shown). One port is for connecting to the LAN (D), and the other can be connected to a desktop data device or PC (B), or another LAN interface terminal.



LIP-8040E Gigabit Phone Connections

1.5.1 Power

All LIP-8000 series phones can be powered by the AC/DC Adapter-K- (48 VDC @0.3A; shown “C” in previous graphic) or over the LAN cable using the POE8 or other 802.3af compliant switch.

If using the AC/DC Adapter, after connecting the Phone to the LAN, the Adapter’s DC voltage plug is inserted into the power-input jack in the underside of the Phone. One end of the AC power cord is inserted into the mating receptacle of the AC Adapter, and the other end is inserted into the AC power outlet.
NOTE—LIP-8000 series consoles are powered through the flat cable used to connect the console to the IP Gigabit phone (shown). **Up to 2(without LIP-8048DSS) or 4(with LIP-8048DSS) consoles can be chain-link connected to the phone.**

1.5.2 Wall Mount

The LIP-8000 series phones can be wall mounted as needed. The following instructions describe how to perform a wall mount installation. For more detailed instruction, refer to the **iPECS Hardware Description and Installation Manual**.

- Mark and drill two (2) 7mm holes for plastic wall anchors.
- Insert the two (2) anchors into the holes and insert and tighten the each screw leaving about 2.5 mm (1/8-inch) of the screw exposed.
- Slide the LIP-8000 phone over the screws and assure the phone is secure.
- NOTE—It may be necessary to remove the phone and tighten or loosen the screws for a secure mounting.

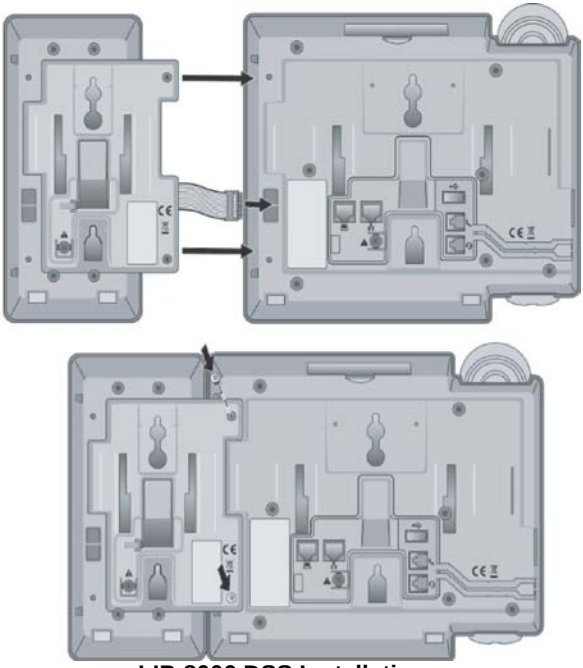
1.6 DSS (Direct Station Select) Console Installation

A DSS console can be installed with the LIP-8000E series phone as shown in Figure. Up to 3 consoles may be daisy chained as shown using the flat cable provided. Keep in mind the following conditions when installing LIP-8000 DSS consoles.

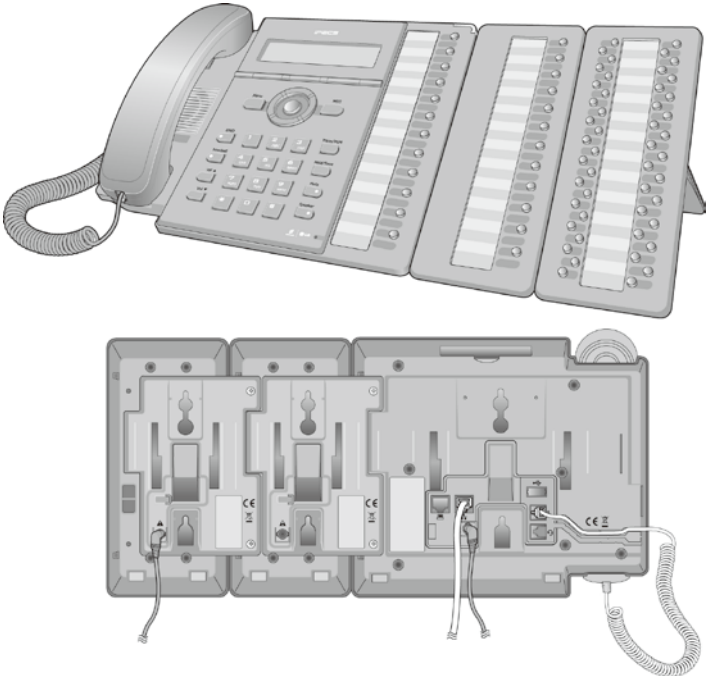
1. The AC/DC adapter must be used for LIP-8048DSS.
2. Up to two (2) LIP-8012LSS and/or LIP-8012DSS can be installed with LIP-8000E Phone.
3. The LIP-8048DSS must be separately powered.

The available DSS is as follows:

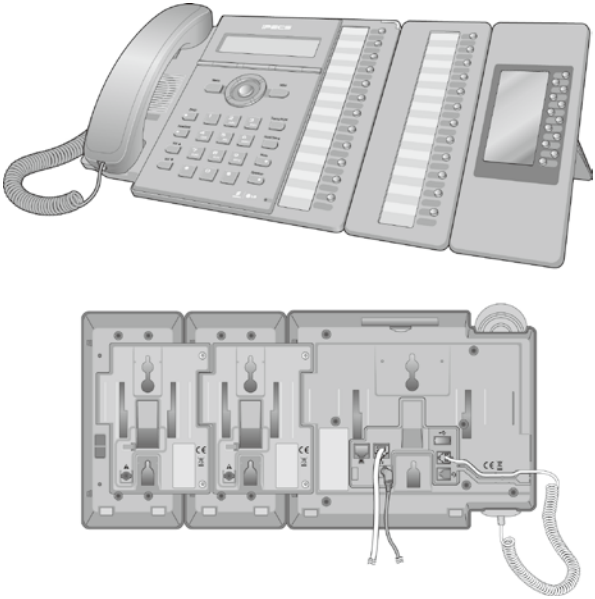
1) LIP-8012DSS
2) LIP-8012LSS
3) LIP-8048DSS



LIP-8000 DSS Installation



LIP-8000 DSS Installation (12DSS + 48DSS)



LIP-8000 DSS Installation (12DSS + 12LSS)

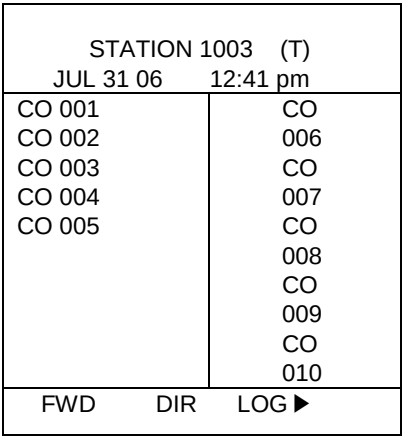
2. LCD, Speakerphone & Related Featrues

2.1 Using the LCD

The iPECS LIP-8040E has a large 9-line, 24 character across Liquid Crystal Display (LCD) which is divided into 3 sections. The upper section consists of 3 lines. The first line displays various icons. The 2nd and 3rd line are used to convey information to you. They provide the date, time and station number display while idle. It will also provide called/calling name/number display, feature status, etc.

The middle section displays the string of flex button or a monthly calendar. The user can select by pressing CALENDR Soft button of next page in idle state.

The lower section, which consists of a single line, is an interactive menu to guide you through feature access and *User Program* selections. The Navigation button is used to move through Display Menu items.



2.2 Display Menu

With the Display Menu, you can access the Network Configuration menu as well as other phone features through simple menu trees. The Display Menu is activated using the Menu button.

In iPECS-LIK

To activate the Display Menu:

- Press MENU button,
- Press the Navigation up/down buttons and press the OK Soft button to select,
  OR
- Dial the associated digit (Menu selections shown):

SELECT (0 - 4)
1. PHONE SETTING 2. CONFERENCE ROOM PGM 3. ICM SMS 4. NETWORK CONFIG 0. ATTENDANT BACK OK

NOTE—The '0. Attendant' selection will only display on the System Attendant phone.

In iPECS SBG-1000

To activate the Display Menu:

- Press MENU button,
- Press the Navigation up/down buttons and press the OK Soft button to select,
  OR
- Dial the associated digit (Menu selections shown):

SELECT (1 - 2)
1. PHONE SETTING 2. NETWORK CONFIG   BACK OK

In iPECS-MG

To activate the Display Menu:

- Press MENU button,
- Press the Navigation up/down buttons and press the OK Soft button to select,
  OR
- Dial the associated digit (Menu selections shown):

1. PHONE SETTING 2. NETWORK CONFIG BACK OK EXIT

2.2.1 Phone Setting

In iPECS-LIK, iPECS SBG-1000

To configure the Phone:

- Press MENU button and 1 (Phone Setting),
- The following menu displays:

SELECT (1 - 8)
1. STATION NAME PROGRAM 2. ICM RING 3. CO RING 4. PASSWORD PROGRAM 5. LANGUAGE PROGRAM BACK OK

SELECT (1 - 8)
6. STA RING DOWNLOAD 7. BACKLIGHT 8. FONT PROGRAM BACK OK

- **Station Name Program**—Input up to 12 digits using the keypad (press DND button to backspace/delete a character), then press the OK Soft button. To input characters:
    - Press the second Soft button to select ABC> or abc> mode,
    - To input the first character of a button, press the button 1 time (ex., for ‘a’, press 2 button once),
    - To input the second character of a button, press the button 2 times (ex., for ‘b’, press the 2 button twice.
    - To input the third character of a button, press the button 3 times (ex., for ‘f’, press the 3 button three times.
- **ICM Ring/CO Ring**—Use Next Soft button to move through list of ring types, and press OK Soft button to select.

- **Password Program**—Enter the current password and press the OK Soft button, then enter the new password and press the OK Soft button.
- **Language Program**—Use Navigation up/down buttons to highlight available languages supported, and press OK Soft button to select.
- **Station Ring Download**—Select the ring position (5-8) and select the ring file; press the SAVE Soft button to select.
- **Backlight**—Use Navigation up/down buttons to select the operation of the backlight, and press the OK Soft button to select.
- **Font Program**— Use Navigation up/down buttons to select the LCD Font, and press the OK Soft button to select.

In iPECS-MG

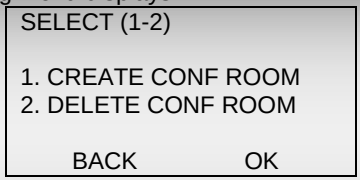
- **Set Font Type**—Select the font type(0 for new roman, 1 for gothic), and press the OK Soft button to select.
- **Set Contrast**—Press the VOL ▲▼ buttons or Use Navigation up/down buttons to adjust the brightness, then press the OK Soft button to select.

2.2.2 Conference Room (iPECS-LIK)

The User can create and delete Conference rooms.

To configure a Conference Room:

- Press MENU button and 2 (Conference Room),
- The following menu displays:



- Press the Navigation up/down keys to highlight and then press the OK Soft button to select,
  OR
- Dial the number associated to the selection,
- Enter the room number and dial the password,
- Press the OK Soft button.

2.2.3 ICM SMS (iPECS-LIK)

The user can send SMS messages to other stations and retrieve received SMS messages.

To send a SMS message:

- Press MENU button and 3 (ICM SMS),
- The following menu displays:

```
SELECT (1-2)

1. SEND MESSAGE
2. IN BOX(03)

 BACK          OK
```

- Press the Navigation up/down keys to highlight and then press the OK Soft button to select,
  OR
- Dial 1 to send a message,
- Dial 1 if resending, or 2 to send a new message (edit),
- Enter the Station number and message (if sending message),
- Press the OK Soft button.

To retrieve a SMS message:

- Press MENU button and 3 (ICM SMS),
- The following menu displays:

```
SELECT (1-2)

1. SEND MESSAGE
2. IN BOX(03)

 BACK          OK
```

- Press the Navigation up/down keys to highlight and then press the OK Soft button to select,
  OR
- Dial 2 to retrieve a message.
- Dial 1 to send a message,
- Dial 1 if resending, or 2 to send a new message (edit),
- Enter the Station number and message (if sending message),
- Press the OK Soft button.

2.2.4 Network Configuration

The User can review the current network configuration or modify a new phone network configuration.

To access Network Config. settings:

- Press MENU button and 4(iPECS-LIK)/2(iPECS SBG-1000, iPECS-MG),
- Enter the password (default=147*); the following will display:

```
MFIM #[1/2]  ?
MFIM #1  - CHANGE[#]
```

- Press the # key to toggle between multiple profiles (MFIM),
- Press the VOL ▲ ▼ buttons to advance to the next network configuration item,
- Press the HOLD/SAVE button to save each setting.

To configure 802.1x:

- In Network Config. Menu, use VOL ▲ ▼ buttons to locate the 802.1x configuration screen (shown),

```
802.1x ?
[ENABLED] – CHANGE[#]
```

- Enable in 802.1x menu and press the **Hold** button.
- Enter ID in **802.1x USER ID** menu (It appears when 802.1x is enabled.) and press the **Hold** button.
- Enter Password in **802.1x PASSWORD** menu (It appears when 802.1x is enabled.) and press the **Hold** button.

To set LLDP:

- In Network Config. Menu, use VOL ▲ ▼ buttons to locate the LLDP configuration screen (shown),

```
LLDP?
[ENABLED] – CHANGE [#]
```

- Enable in LLDP? menu and press the **Hold/Save** button.

To configure VPN:

- In Network Config. Menu, use VOL ▲ ▼ buttons to locate the DNS Address menu.
- Enter DNS address in **DNS ADDRESS** menu
- Use VOL ▲ ▼ buttons to locate the VPN configuration screen (shown),

```
VPN ?
[ENABLED] – CHANGE[#]
```

- Enable in VPN Menu and press the **Hold** button.
- Following steps are available when VPN is enabled.
- Enter VPN Server address in **VPN SERVER IP** menu and press the **Hold** button.
- Enter TCP/UDP port number for both local and remote in **VPN PORT** and press the **Hold** button. The default value is 1194.
- In **VPN USER ID**, enter ID and press the Hold button.
- In **VPN USER PASSWORD**, enter Password and press the **Hold** button.

To set default Config. settings:

- In Network Config. Menu, use VOL ▲ ▼ buttons to locate the Default Config. Screen (shown),

```
SET DEFAULT CONFIG(DOT:*)

•
```

- Press the * key.

To exit Config. settings:

- Press the SPEAKER button,
- Press the * key to exit,
  OR
- Press the # key to Reset/Reboot the phone with new setting.

2.2.5 Attendant menu (iPECS-LIK, iPECS SBG-1000)

The Attendant menu is only available on the System Attendant phone.

In iPECS-LIK

To access the Attendant menu:

- From the Attendant Station phone, press the MENU button,
- Press 0 (Attendant); the following will display:

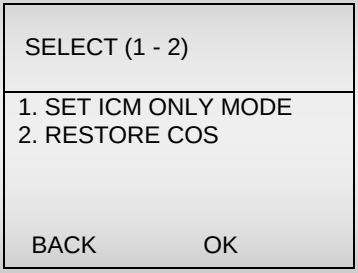
SELECT (1 - 5)
1. DATE/TIME SET 2. SET ICM ONLY MODE 3. RESTORE COS 4. MONITOR CONF ROOM 5. DELETE CONF ROOM BACK OK

- **Date/Time Set**—Enter mm/dd/yy, and press OK Soft button; enter hh/mm, and press OK Soft button.
- **Set ICM Only Mode**—Dial the Station Range for ICM only calls (ex., 103-108=103108), and press the OK Soft button.
- **Restore COS**—Dial the Station Range for COS restoring (ex., 103-108=103108), and press the OK Soft button.
- **Monitor Conference Room**—Enter the Conference Room number to view the number of attendees in the Conference Room.
- **Delete Conference Room**—Enter the Conference Room number and press the OK Soft button to delete.

In iPECS SBG-1000

To access the Attendant menu:

- From the Attendant Station phone, press the MENU button,
- Press 0 (Attendant); the following will display:



- **Set ICM Only Mode**—Dial the Station Range for ICM only calls (ex., 103-108=103108), and press the OK Soft button.
- **Restore COS**—Dial the Station Range for COS restoring (ex., 103-108=103108), and press the OK

2.3 Using the Speakerphone

Activate the iPECS Speakerphone at any time (except for Paging) in place of lifting the handset to receive or place calls.

Additionally, you may switch between the handset and Speakerphone during a call. By keeping the handset Off-hook, the **Group Listen** feature is activated, which provides incoming audio over the speaker with outgoing audio from the handset. This permits a local 'group' to listen to both sides of the conversation without interfering with the conversation.

While in a conversation using the Speakerphone, **Mute** the microphone using the MUTE button. When Mute is active, the MUTE button LED will be illuminated. To turn off Mute, press the MUTE button again.

With **Auto Speaker Select**, activating or accessing a feature by pressing its button will activate the Speakerphone automatically.

When using a Headset, the SPEAKER button controls the ON/OFF-hook state for the phone.

To use the Speakerphone to answer or place a call:

- Press SPEAKER, the phone goes off-hook and sends audio to the speaker and the microphone.

To control the volume of the Speakerphone or handset:

- Press the VOL▲ VOL▼ button.

To Mute the microphone:

- Select the MUTE button.

To turn off Mute (turn the microphone ON):

- Press the MUTE button.

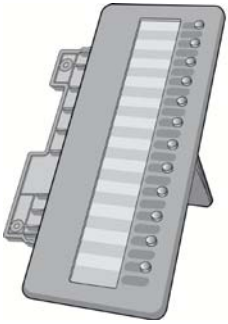
To activate Group Listen while on an active handset call:

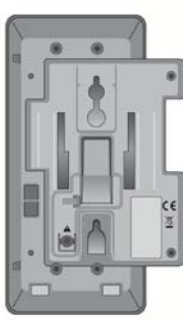
- Press the SPEAKER button.

2.4 Using a Serial DSS

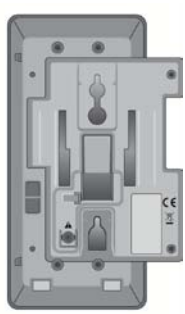
The LIP-8012DSS, LIP-8012LSS, and LIP-8048DSS can be connected with the LIP-8040E using the RS-232 cable. Be sure to verify the serial DSS and LSS capacities with the iPECS System to ensure usability (refer to iPECS Manual). The following graphics show the front and rear view of each.

NOTE—A Linked Pair slave station cannot use a serial DSS. iPECS SBG-1000 does not support serial DSS.

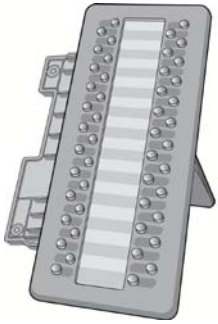


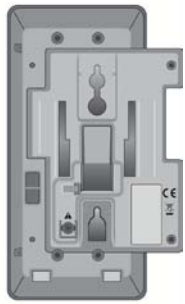


LIP-8012DSS



LIP-8012LDSS





LIP-8048DSS

In iPECS-MG

To use a Serial DSS:

- Set the Station's Serial DSS Usage Map (Admin PGM120-Flex2),
- Verify the DSS power is OFF (LIP-8048DSS only),
- Power-OFF the phone,
- Connect the serial DSS to the phone,
- Power-ON the phone and the DSS (LIP-8048DSS only),
- Program the DSS button using Web Admin Programming or PGM126,
- Edit LSS label from Admin PGM126.

To initialize Serial DSS Database:

- Clear the Station's Serial DSS Usage Map (Admin PGM120-Flex2),
- Admin PGM120-Felx3 to reset the phone.

In iPECS-LIK

To use a Serial DSS:

- Verify the Station has Serial DSS Usage authority (Admin PGM111-Flex21),
- Verify the DSS power is OFF (LIP-8048DSS only),
- Power-OFF the phone,
- Connect the serial DSS to the phone,
- Power-ON the phone and the DSS (LIP-8048DSS only),
- Program the DSS button using Web Admin Programming or PGM115,
- Edit LSS label from Admin PGM129 (default label is provided from MFIM).

To initialize Serial DSS Database:

- Enter Admin PGM111-Flex21,
- Select Station range to clear Serial DSS Database,
- Dial 0, and press the HOLD/SAVE button.

3. Receiving Calls

3.1 Answering a Call While Idle

There are 3 basic types of incoming calls; internal/external ringing calls, **Intercom Voice Announce** calls, and *Hold* recalls.

Your phone may be assigned **Ringing Line Preference**; in this case, calls that ring are answered by lifting the handset. Otherwise, you must press the flashing Flex button.

External calls to an iPECS Phone will appear under the CO/IP line or a **LOOP** button.

External calls are from CO lines or VoIP channels that are programmed to ring at your phone. For external calls, **Delay Ring** may be assigned allowing others to answer the call before the call rings at your phone.

Calls can be forwarded in some manner from another user; if providing call coverage for other users, you may also receive **Station Call Coverage** calls.

Calls placed on **Hold**, including Transfers, parked calls, etc. will recall if left on hold for too long.

ICM Voice Announce calls are answered based on the **ICM Signaling mode** at the receiving phone; in Hands-free (HF) mode, after the splash tone and announcement, speak normally into the microphone. In the Privacy (PV) mode, lift the handset to respond. The **ICM Signaling mode** can be assigned in *Station Programming*.

The LCD will display the calling number or, if available, the name of the station or CO/VoIP line, **CO Line Name Display**.

To answer a call ringing at your phone:

- Lift the handset or press the flashing Flex button (as needed), the call will be connected.

To respond to an Intercom Voice Announce call:

- In **HF** mode, simply speak as normal into the microphone,
  OR
- In **PV** mode, lift the handset to respond.

3.2 Responding to a Call While Busy

While you are busy on another call, you may receive a Muted Ring, Camp-On tones, or Voice-Over announcements. Muted Ring is provided over the speaker of your Phone indicating a **Call Waiting**. You also may receive **Camp On** tones, a burst of tones on top of the existing call, as an indication of another call waiting.

While busy, certain stations can activate **Voice-Over** to your phone. In this case, audio is received from both the active call and the **Voice Over** announcement at the same time.

Respond to any of these **Off-hook Signals** in one of several ways; place the existing call on **Hold** and respond to the new incoming call, activate *One-time DND*, send a *Silent Text Message*, or ignore the new call.

Silent Text Message requires a TEXT MESSAGE button (not available on a SLT or other non-display terminal).

The Attendant or Secretary may use **Intrusion** to announce a call while you are busy.

To answer a Call Waiting:

- Press HOLD/SAVE, and/or
- Press the flashing CO/IP LINE button.

To activate One-time DND:

- Press the DND button.

To send a Silent Text Message:

- Press the programmed TEXT MESSAGE button,
- Select the desired message to send.

3.3 Using Answering Machine Emulation (AME)

When a call is connected to your voice mail, you can screen the call as if using a normal Answering Machine. The caller's voice is played over your speaker while the message is being recorded. There are two methods of notification and call screening provided, Ring or Speaker mode.

Ring mode (iPECS-LIK & SBG)/LED Blink Mode (iPECS-MG)—the Answering Machine Emulation (AME) Flex button will flash to notify you of a call. You may

press the Flex button to hear the caller as the voice message is stored.

Speaker mode (iPECS-LIK & SBG)/Speaker Hearing Mode (iPECS-MG)—when the call is sent to the voice mailbox, the caller's voice is automatically broadcast over the speaker of your iPECS Phone.

You may terminate screening, leaving the caller in voice mail to record a message, talk with the caller and record the conversation in the mailbox, or answer the call and disconnect the Voicemail. The AME feature is only available when using the iPECS VMIM/VSF Voice Mail; a MUTE and AME button should be programmed (refer to Appendix A User Program Codes).

To screen a call in Ring mode(iPECS-LIK & SBG)/LED blink mode(iPECS-MG):

- Press the flashing AME button, the caller's voice is broadcast over the station speaker and stored in the voice mailbox (in the Speaker mode, broadcast is automatic).

To stop the voice broadcast and leave the caller in Voice Mail:

- Press the illuminated SPEAKER button.

To talk with the caller and record the conversation in Voice Mail:

- Press the MUTE button.

To answer the call and cancel the voice message recording:

- Press the illuminated AME button, the caller is connected and the Voice Mail disconnected.

3.4 Differential Ring Signals

When multiple phones in a small area ring, it can be difficult to tell which are ringing. The iPECS Phone has 14 **Ring Tones** available for differentiating one phone's ringing from another. Four of the tones are stored in the phone permanent memory; the remaining ten tones are in the system memory. Four of these ten can be downloaded into the phone memory for use as the 5th to 8th **Ring Tone**.

In iPECS-LIK

To download a Ring Tone from System memory:

- Press TRANS/PGM,
- Dial 1 for Ring Tones,
- Dial 5 for Ring Tone download,
- Dial the phone's memory location to receive the tone (5-8),
- Dial 0-9 for the desired tone number; a confirmation tone is heard,
- Press HOLD/SAVE to download.

To select a Ring Tone from phone memory:

- Press the TRANS/PGM button,
- Dial 1 for Ring Tones,
- Dial 1 or 2 for Internal or External ring,
- Dial 1-8 for the desired tone number; a confirmation tone is heard,
- Press HOLD/SAVE to make the selection.

In iPECS-MG

To download a Ring Tone from System memory:

- Press TRANS/PGM,
- Dial 2 for Ring Tones,
- Dial 3 for Ring Tone download,
- Dial the phone's memory location to receive the tone (5-8),
- Dial 0-9 for the desired tone number; a confirmation tone is heard,
- Press HOLD/SAVE to download.

To select a Ring Tone from phone memory:

- Press the TRANS/PGM button,
- Dial 2 for Ring Tones,
- Dial 1 or 2 for Internal or External ring,
- Dial 1 for Keyset Ring Source,
- Dial 1-8 for the desired tone number; a confirmation tone is heard,
- Press HOLD/SAVE to make the selection.

3.5 Answering Calls at Night

In the Night mode, **Loud Bell Control** may be used to send ring signals to external bells. You may answer these calls with **Universal Night Answer (UNA)**.

To answer a call ringing during night mode:

- Lift the handset,
- Dial **567** (iPECS-Lik)/ 587(iPECS-MG) (UNA code).

3.6 Answering Calls to Other Stations

When nearby stations are ringing, you may pick-up (answer) the call. Select to answer a call ringing at a specific station (**Directed Call Pick-Up**) or you may choose to answer the oldest call ringing to your station group (**Group Call Pick-Up**). Assign a Flex button with the Group Call Pick-Up code (566) for one-touch access. **NOTE—Pick-Up will not answer calls on the ringing station Private Line unless the line appears on your phone.**

To answer a call ringing at another station:

- Lift the handset,
- Dial **7 (**Directed Call Pick-Up code),
- Dial the Intercom Number of the ringing station; the call will be connected.

To answer a call ringing at a station in your group:

- Lift the handset,
- Dial **566 (**Group Call Pick-Up code), the call is connected.

3.7 Using Do-Not-Disturb (DND) to Block Incoming Calls

Activate Do-Not-Disturb when you wish to not be interrupted; the phone will block incoming calls. Internal callers will receive a fast busy tone and the display will show the DND status. Activate Do-Not-Disturb while ringing(One-Time DND); Ringing terminates and the caller will get a fast busy tone and it requires a DND button.

When an Executive activates DND, calls are forwarded to the paired Secretary automatically.
The Attendants and Secretary may be able to activate **DND Override** and **Intrude** on an active call. The Attendants may also cancel DND at other stations.

To toggle DND ON and OFF:

- Press the DND button.

3.8 Forwarding Calls

3.8.1 Forwarding calls to another Station or Voice Mail

Incoming calls may be diverted to other resources of the system. Resources include other stations, **VMIM/VSF Voice Mail** and **External Voice Mail**. Your LCD and the LCD of the forward receiver will both indicate the forward status.
Call Forward can be activated from your phone or from a different station (**Call Forward, Remote**). You may define the conditions or 'type of forward' as below:

1: **Unconditional**—all calls to the station, except recalls, are forwarded.

2: **Busy**—Immediately forwards all calls, except recalls, when the station is busy.

3: **No Answer—**forwards all calls to the station, except recalls, when the station does not answer within the No Answer timer.

4: **Busy/No Answer—**forwards calls if the station is busy or does not answer within the No Answer timer.

When you forward calls from a different station, you may need to enter your *Authorization Code*.

Calls on a Private Line will not forward except to a station with an appearance of the Private Line or to Voice Mail.

To activate Call Forward from your phone to another phone or internal system resource:

- Lift the handset,
- Press the Fwd Soft button,
- Dial the type of forward code 1-4,
- Dial the destination number.

To deactivate Call Forward from your phone:

- Lift the handset,
- Press the Fwd Soft button,
- Dial #.

To activate Call Forward for your phone from a different phone within the System (Call Forward, Remote):

- Lift the handset,
- Press the Fwd Soft button,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization code (Station number & Password),
- Dial the 'type of forward' code 1-4,
- Dial the destination number.

To deactivate Call Forward, Remote:

- Lift the handset,
- Press the Fwd Soft button,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization code (Station number & Password),
- Press the # key.

3.8.2 Forwarding calls to an external number

Forward calls to an external destination; calls can be forwarded from an internal station or a remote location. You may define the conditions or 'type of forward' as listed below:

1: **Unconditional**—all calls to the station, except recalls, are forwarded.

2: **Busy**—Immediately forwards all calls to the station, except recalls, when station is busy.

3: **No Answer—**forwards all calls to the station, except recalls, when the station does not answer within the No Answer timer.

4: **Busy/No Answer—**forwards calls if the station is busy or does not answer within the No Answer timer.

When you forward calls from a different station or a remote location, enter your *Authorization Code*. In addition, from a remote location, you must access the system through a *DISA* enabled CO line.

In iPECS-LIK, iPECS SBG-1000

To activate Call Forward, Off Premise (forward to an external number) from your phone:

- Lift the handset,
- Press the Fwd Soft button,
- Dial the type of Forward code (1-4),
- Press Speed Soft button,
- Dial Speed Dial bin number,
- Replace the handset, return to idle.

To activate Call Forward, Off Premise (forward to an external number) from a different phone within the System:

- Lift the handset,
- Press the Fwd Soft button,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization code (your Station number + Password),
- Dial the type of Forward code (1-4),
- Press Speed Soft button,
- Dial Speed Dial bin number,
- Replace the handset, return to idle.

To activate Call Forward, Off Premise (forward to an external number) from a remote location:

- Lift the handset,
- Dial the telephone number of a DISA assigned CO line,
- While receiving dial-tone, dial 554 (Call Forward feature code),
- Dial your Authorization Code (your Station number + Password),
- Dial the type of Forward code (6-9),
- Dial Speed Dial bin number,
- Replace the handset, return to idle.

In iPECS-MG

To activate Call Forward, Off Premise (forward to an external number) from your phone:

- Lift the handset,
- Press the Fwd Soft button or dial 554
- Dial the type of Forward code (1-4),
- Dial Telephone number,
- Replace the handset, return to idle.

To activate Call Forward, Off Premise (forward to an external number) from a different phone:

- Lift the handset,
- Press the Fwd Soft button or dial 554,
- Dial 0 (Remote Call Forward code),
- Dial your Authorization code (your Station number + Password),
- Dial the type of Forward code (1-4),
- Dial Telephone number,
- Replace the handset, return to idle.

3.8.3 Forwarding callers to a Text Message

Using an iPECS Phone, the system can be setup to return a 'Text Message' to internal callers. When calling your Station, internal callers will automatically receive the selected message or you can send a text message you select in response to an internal call, **Silent Text Message**.

There are 11 **Custom Display Messages** each up to 24 characters. Ten can be assigned by the Attendant and one assigned by you.

In addition, there are ten fix Pre-Defined Text Messages; some allow auxiliary input for time, date, etc. (as shown in message list).

In iPECS-LIK

Message 01:	LUNCH RETURN AT hh:mm
Message 02:	ON VACATION RETURN AT DATE mm:dd
Message 03:	OUT OF OFFICE RETURN AT TIME hh:mm
Message 04:	OUT OF OFFICE RETURN AT DATE mm:dd
Message 05:	OUT OF OFFICE RETURN UNKNOWN

Message 06:	CALL (enter up to 17 digits)
Message 07:	IN OFFICE STA xxxx
Message 08:	IN MEETING RETURN AT TIME hh:mm
Message 09:	AT HOME
Message 10:	AT BRANCH OFFICE

In iPECS-MG

Message 1:	LUNCH RETURN AT hh:mm
Message 2:	ON VACATION RETURN AT DATE mm:dd
Message 3:	OUT OF OFFICE RETURN AT TIME hh:mm
Message 4:	OUT OF OFFICE RETURN AT DATE mm:dd
Message 5:	OUT OF OFFICE RETURN UNKNOWN
Message 6:	CALL (enter up to 17 digits)
Message 7:	IN OFFICE STA xxxx
Message 8:	IN MEETING RETURN AT TIME hh:mm
Message 9:	AT HOME
Message 0:	AT BRANCH OFFICE
*	User Custom Message
#	Deactive

In iPECS-LIK

To activate Custom or Pre-Defined Message Forward:

- Press TRANS/PGM,
- Dial User Program feature code 51,
- Dial the two-digit text Message code (00-20),
- Dial any auxiliary input for messages 01-04 and 06-08,
- Press HOLD/SAVE, forward confirmed.

To cancel activated Message:

- Press the Fwd Soft button,
- Dial #.

To program the Station Custom Message (00) at your station:

- Press TRANS/PGM,
- Dial User Program feature code 52,
- Enter Message contents, up to 24 characters, using the following Character Entry Chart:

Q – 11 Z – 12 . – 13 1 – 10	A - 21 B - 22 C - 23 2 - 20	D - 31 E - 32 F - 33 3 - 30
G – 41 H - 42 I - 43 4 - 40	J - 51 K - 52 L - 53 5 - 50	M - 61 N - 62 O - 63 6 - 60
P - 71 R - 72 S - 73 Q - 7* 7 - 70	T - 81 U - 82 V - 83 8 - 80	W - 91 X - 92 Y - 93 Z - 9# 9 - 90
*1 - Blank *2 - : *3 - ,	0-00	#

Character Entry Chart

- Press HOLD/SAVE, to save the message.

In iPECS-MG

To activate Custom or Pre-Defined Message Forward:

- Press TRANS/PGM,
- Dial User Program feature code 41,
- Dial the one-digit text Message code (0-9),
- Dial any auxiliary input for messages 1-4 and 6-8,
- Press HOLD/SAVE, forward confirmed.

To cancel activated Message:

- Press the Fwd Soft button,
- Press FWD button or dial 554,
- Dial #.

To program the Station Custom Message (00) at your station:

- Press TRANS/PGM,
- Dial User Program feature code 42,
- Enter Message contents, up to 24 characters, using the following Character Entry Chart:

Dial Pad button	Letter Type								
	Uppercase (ABC)				Lowercase (ABC)				Num
	Button depressions								
	1	2	3	4	1	2	3	4	1
1	@	:	/	<	@	:	/	<	1
2	A	B	C		a	b	c		2
3	D	E	F		d	e	f		3
4	G	H	I		g	h	i		4
5	J	K	L		j	k	l		5
6	M	N	O		m	n	o		6
7	P	Q	R	S	p	q	r	s	7
8	T	U	V		t	u	v		8
9	W	X	Y	Z	w	x	y	z	9
0	.	,	?	!	.	,	?	!	0
*	*				*				*
#	#				#				#

Character Entry Chart

- Press HOLD/SAVE, to save the message.

4. Placing Calls

4.1 Internal Calls

You can place calls to other stations in the system over the Intercom. The call will ring, or for an **ICM Voice Announce** call, a splash tone will be heard. Ring or Voice Announce is normally determined by settings at the called station but you may change this by dialing '#' after placing the call. By changing the mode, a Voice Announce call will ring or a ringing ICM call will allow Voice Announce (toggle).

You can assign a Flex button for **Direct Station Selection/Busy Lamp Field (DSS/BLF)**. The DSS/BLF button allows you to call another station with the single touch of a button. The button LED will display the other station's status (ON=busy, OFF=idle).

When you go off-hook, you may connect to another station or system resource automatically. This **Prime Line Preference** may be immediate or delayed allowing you to take other actions during the delay. Otherwise, you may press another Flex button before going off-hook to override Prime Line Preference.

If you go off-hook and take no action, Intercom dial-tone will time-out, and after the **Howler tone** is received, your phone will be placed out-of-service in **Intercom Lock-Out**; you then must hang-up to return the phone to an idle state.

To place an Intercom call:

- Lift the handset,
- Dial the Intercom number of the desired station,
- When the call is answered or the Splash tone is heard, begin speaking with the called party.

4.1.1 Using Camp-On when calling a busy station

If the called party is busy, you may activate **Camp-On**, **Callback** or **Voice Over** at the station. **Camp-On** allows you to wait off-hook for the called station to answer. **Callback** allows you to hang-up, and when the busy station returns to an idle state, the system will call

your Station; after you answer the callback, the system will call the previously busy station.
If you are the Attendant or Secretary, you may activate **Intrusion**. You may also use **Step Call**; dial the next station by dialing the last digit of the Intercom number.

To Camp-On (wait off-hook) for a busy station:

- Press * and await an answer.

To request a Callback (wait on-hook) for a busy station:

- Press the MSG button and hang-up.

To make a Voice Over announcement to a busy station:

- Dial #,
- After the Splash tone is heard, begin speaking.

4.1.2 Leaving a Message Wait

If the called user does not answer or is in DND mode, you may leave a **Message Wait**. The called user will receive a Message Wait indication; the message icon will be displayed. If the ring/message LED is set to Message Wait Indication, the ring/message LED will flash.

To activate Message Waiting:

- When calling a number that is busy or in DND mode, press the MSG button and hang-up.

4.2 External Calls

4.2.1 Placing external CO/VoIP calls

External calls are placed on CO/IP lines. These 'lines' are accessed either using a button on the iPECS Phone assigned as a **CO/IP line** or using dial codes. The CO/IP lines are grouped for different types of calls, local, long distance, etc. Using the **CO/IP line group** code, you will be able to access any line from the group. A Flex button on the iPECS Phone assigned as a LOOP button lets you access a line from a group. Dial codes for access to CO/IP lines are:
Individual CO/IP line access—

88 + Line number (01-10 for iPECS SBG-1000, 01-42 for iPECS-50 & 100, 001-200 for iPECS-300, 001-400 for iPECS-600, or 001-600 for iPECS-1200).

or

88 + Line number (01-80 for iPECS-MG100, or 001-240 for iPECS-MG300).

CO/IP Group access—

801-805 for iPECS SBG-1000, 801-820 for iPECS- 50 & 100, 801-872 for iPECS-300 & 600, or 8900`-89100 for iPECS-1200

or

801-824 for iPECS-MG100, or 801-872 for iPECS-MG300

Any CO/IP Line access—

9

When dialing on a CO line which uses pulse style signals, you may activate **Dial Pulse to Tone Switchover** changing to DTMF style dialing (for banking services, etc.).

When placing an IP call, you must dial an IP address using the '*' key in place of the dot.

If **Least Cost Routing** is set-up, the number you dial will be analyzed and the system will place the call on the least expensive route.

You may be assigned **Dialing** and/or **CO/IP Line Access Restrictions**, in which case you will receive error tone if you attempt to dial or access a restricted number/CO/IP line. **CO/IP line** and **Station Class Of Service (COS)**, which establish dialing restrictions, may vary during Day and Night operation (**Day/Night COS**).

You may need to enter an *Authorization code* before placing calls, in which case you will receive a second dial tone.

Your external calls may be subject to **Call Time Restrictions**, you will receive a **Call Warning Tone** prior to disconnect.

NOTE—In the event of an emergency, assigned Emergency numbers (ex., a 911 call) may be dialed from any station in the System, regardless of a Station's dialing restrictions (COS).

To place an external call:

- Lift the handset,
- Dial the CO/IP line/group,
- Dial the desired number.

4.2.2 Waiting for the next available CO/IP line

If all the lines connected to your system are busy, you will receive an All Trunks Busy signal. You may request to be notified when a line is available for use.

To activate a queue if the selected/dialed line is busy:

- Select the desired CO/IP line button; when the busy notification is returned, press the MSG button,
- Return to an idle state by going on-hook; when the line is available, the Station will be notified (ringing).

4.2.3 Account Codes: Tracking External calls for billing

In some cases, you or your company may desire to track calls for billing or other purposes. You may enter an **Account Code**, which is output from the system to a printer in the **SMDR** report. You may have an **Account Code** Flex button (refer to ***Assigning features to Flex buttons***).

To enter an Account Code before the call:

- Lift the handset,
- Press the assigned ACCOUNT CODE button,
- Dial the Account Code (1-12 digits),
- Press *, Intercom dial tone is heard,
- Place the CO/IP call as normal.

To enter an Account Code during a call:

- Press the assigned ACCOUNT CODE button,
- Dial the Account Code (1-12 digits),
- Press *.

4.2.4 Disable dialing from your phone

You can temporarily 'Lock' your phone by activating **Temporary COS**, which will disable all dialing from the phone. To deactivate **Temporary COS** you must enter the station's Authorization code.

To activate Temporary COS:

- Press TRANS/PGM,
- Dial 21(iPECS-LIK)/31(iPECS-MG) (User Program code),
- Dial your Authorization code(iPECS-MG),
- Press HOLD/SAVE.

To deactivate Temporary COS:

- Press TRANS/PGM,
- Dial 22(iPECS-LIK)/32(iPECS-MG) (User Program code),
- Dial your Authorization code,
- Press HOLD/SAVE.

4.2.5 Temporarily override dialing restrictions at a phone

Override the dialing restrictions at any phone by activating **Walking COS**. The **Walking COS** dialing restriction levels are applied for a single call only. For multiple calls, you will need to reactivate **Walking COS** or use the Flash Soft button to regain CO/IP dial-tone.

To activate Walking COS:

- Press TRANS/PGM,
- Dial 23(iPECS-LIK)/33(iPECS-MG) (User Program code),
- Dial your Authorization Code (station number and password),
- Dial '*' (iPECS-MG)
- Place call as normal.

4.3 Using Directory

4.3.1 Using Last Number Redial (LNR)

The last number dialed on an external call is automatically saved in the **Last Number Redial (LNR)** buffer. The iPECS Display Phone, the system will store

the numbers dialed on the last 15(iPECS-LIK)/100(iPECS-MG) calls.

In iPECS-LIK, iPECS SBG-1000

To dial the Last Number for an external call:

- Lift the handset, and/or press the DIR Soft button,
- Press Speed Soft button,
- Dial *,
- Press the Navigation up and down buttons to select from the last 15 numbers dialed,
- Press the Send Soft button or HOLD/SAVE.

In iPECS-MG

To dial the Last Number for an external call:

- Lift the handset,
- Press Speed Soft button,
- Dial *,
- or
- press the LOG Soft button,
- Press the Navigation up and down buttons to select from the last 100 numbers dialed or received,
- Press the Send Soft button or HOLD/SAVE.

4.3.2 Using and Entering Saved Number Dial

You may store the last number dialed on an external call to the **Saved Number Dial** buffer for convenient dialing at a later time. The Saved number is stored until a new number is saved.

To place a call using Save Number Dial:

- Lift the handset, and/or press the DIR Soft button,
- Press Speed Soft button(iPECS-LIK & SBG)/Dial 1 for Station Speed(iPECS-MG),
- Dial #.

To store a number in the Save Number Dial:

- While on an outgoing external call, press the Save Soft button.

4.3.3 Using System Speed Dial Numbers

The iPECS SBG-1000 & Micro & 50 & 100 system has memory allocated for 800 **System Speed Dial** numbers (bins 200-999). The iPECS-300 system has memory allocated for 3000 **System Speed Dial** numbers (bins 2000-4999). The iPECS-600 system has memory allocated for 6000 **System Speed Dial** numbers (bins 2000-7999). The iPECS-1200 system has memory allocated for 12000 **System Speed Dial** numbers (bins 20000-31999).

The iPECS-MG100 system has memory allocated for 1000 **System Speed Dial** numbers (bins 2000-2999). The iPECS-MG300 system has memory allocated for 2000 **System Speed Dial** numbers (bins 2000-3999). You may, if allowed, use **System Speed Dial** to call frequently dialed numbers.

In some cases, these numbers are divided into groups called **System Speed Zone Groups**. In this case, you may access some numbers and not others and your dialing restrictions may be invoked.

Only an Attendant can assign **System Speed Dial** numbers.

To place a call using System Speed Dial:

- Lift the handset,
- Press the DIR Soft button,
- Press the speed button(iPECS-LIK & SBG)/Dial 2 for System Speed(iPECS-MG),
- Dial the desired System Speed Dial bin number (200-999 for iPECS SBG-1000 & Micro & 50 & 100, 2000-4999 for iPECS-300, 2000-7999 for iPECS-600, 20000-31999 for iPECS-12000 ,2000-2999 for iPECs-MG100 , or 2000-3999 for iPECS-MG300).

4.3.4 Using and Entering Station Speed Dial Numbers

Each station in the iPECS SBG-1000 & 50 & 100 System is allocated memory for 20 **Station Speed Dial** numbers (bins 00-19) each up to 23 digits. The iPECS-300 & 600 & 1200 support 100 **Station Speed Dial** numbers (bins 000-099). The iPECS-MG 100 & 300 each support 50 **Station Speed Dial** numbers (bins 000-049). These numbers are entered at the user's

station and may include several 'special' instructions. Special instructions and the corresponding button are:

PAUSE will momentarily stop dialing.
FLASH as 1st digit—Activate dial tone detect.

FLASH not as 1st digit—The system will generate a *flash on the CO line*.

MSG as 1st digit—Send digits as *ISDN Keypad Facility message*.

'*' as 1st digit—**Display Security,** the stored number will not be displayed when used.

'*' not as 1st digit—**Dial Pulse to Tone Switchover**, the system will switch from pulse to tone dialing.

When entering a **Speed Dial**, a 16-character name may be associated with the number for *Dial by Name*. Characters are entered with two keystrokes as shown.

Dial Pad button	Letter Type								
	Uppercase (ABC)				Lowercase (ABC)				Num
	Button depressions								
	1	2	3	4	1	2	3	4	1
1	@	:	/	<	@	:	/	<	1
2	A	B	C		a	b	c		2
3	D	E	F		d	e	f		3
4	G	H	I		g	h	i		4
5	J	K	L		j	k	l		5
6	M	N	O		m	n	o		6
7	P	Q	R	S	p	q	r	s	7
8	T	U	V		t	u	v		8
9	W	X	Y	Z	w	x	y	z	9
0	.	,	?	!	.	,	?	!	0
*	*				*				*
#	#				#				#

Character Entry Chart

To place a call using Station Speed Dial:

- Lift the handset, and/or press the DIR Soft button,
- Press the Speed Soft button(iPECS-LIK & SBG)/Dial '1' for station speed(iPECS-MG),
- Dial the desired Station Speed Dial bin number (00-19 or 000-099 or 000-049).

To enter a Station Speed Dial number with CO Line and Name:

- Lift the handset, and/or press the DIR Soft button,
- Press the Speed Soft button(iPECS-LIK & SBG)/Dial '1' for station speed(iPECS-MG),
- Press the ADD Soft button,
- Dial the desired Station Speed Dial bin number,
- Select/dial the CO/IP line/group, (Skip this step in iPECS SBG-1000)
- Dial the desired number to be stored,
- Press HOLD/SAVE,
- Enter the associated name if desired, using the Character Entry Chart,
- Press HOLD/SAVE.

To assign a Station Speed Dial number directly to a Flex button:

- Press TRANS/PGM,
- Press the desired Flex button,
- Select the Tel Num Soft button(iPECS-LIK)/Dial '1' for Number(iPECS-MG),
- Select/dial the CO/IP line/group, (Skip this step in iPECS SBG-1000)
- Dial the desired number,
- Press HOLD/SAVE,
- Enter the associated name if desired, using the Character Entry chart(iPECS-LIK),
- Press HOLD/SAVE.

4.3.5 Using Dial by Name and Entering Your Name

Dial by Name employs three different Directories: Private directory (Station Speed dial), Public Directory (System Speed dial), or Intercom directory.

NOTE—To allow others to contact you via the Intercom directory, you must enter a name for your station (up to 12 characters).

Q – 11 Z – 12 . – 13 1 – 10	A - 21 B - 22 C - 23 2 - 20	D - 31 E - 32 F - 33 3 - 30
G – 41 H - 42 I - 43 4 - 40	J - 51 K - 52 L - 53 5 - 50	M - 61 N - 62 O - 63 6 - 60
P - 71 R - 72 S - 73 Q - 7* 7 - 70	T - 81 U - 82 V - 83 8 - 80	W - 91 X - 92 Y - 93 Z - 9# 9 - 90
*1 - Blank *2 - : *3 - ,	0-00	#

Character Entry Chart

To place a call using Dial by Name:

- Press DIR Soft button,
- Dial the desired directory, 1: Private directory, 2: Public directory, 3: Intercom directory, the LCD will display the names in alphabetical order,
- Scroll using the Navigation up/down keys, or enter search characters (refer to the above Character Entry Chart).
- Press HOLD/SAVE to place the call.

To enter your station user name:

- Press the TRANS/PGM button,
- Dial 74(iPECS-LIK)/34(iPECS SBG-1000)/12(iPECS-MG) (Station User Name code),
- Enter the Name, up to 12 characters (press DND button to backspace/delete a character):
  - To input alphabet
  1. Select ABC> or abc> mode by pressing 2nd Soft Button,
  2. To input 1st character in each dial button(2~9), press the button, once,
     To input 2nd character, press the button, twice,
     To input 3rd character, press the button, three times,
     (Ex., To input 'K', press the '5' button, twice).
  3. To input a character in the same button, continuously press the button after 2 seconds.
     (Ex., in case of KL, press the '5' button twice, then wait 2 seconds and press the '5' button three times).
- Press HOLD/SAVE.

4.3.6 Using Automatic Called Number Redial (ACNR)

When making an external call and a busy signal is received, the system can be set to retry the number until the call is connected, the feature is cancelled, or the maximum number of retries is attempted—this is Automatic Called Number Redial (ACNR).

For each retry, the system will activate your speaker then place the call with the microphone muted. When the remote end answers, you must select the MUTE button, or lift the handset. Either of these actions will cancel the ACNR request as well as connect you to the remote party.

To set up ACNR, while on an outgoing call:

- Use the Navigation button to display the next menu and select the ACNR Soft button,
- Hang-up handset.

To cancel the ACNR request:

- Press the Stop Soft button.

5. Call Handling

5.1 Call Transfer: Sending a call to a different destination

You can send an active call to another station or other resource of the system, **Call Transfer**. You can screen the transfer with the receiving party (**Screened Call Transfer**) or complete the transfer without screening (**Unscreened Call Transfer**).

Transferred calls, internal or external, are place in **Transfer Hold**. These calls will receive Music on Hold (*MOH*) and will recall if not answered in a timely manner.

If an **Unscreened Transfer** call encounters an error or DND, it may immediately recall at your Station.

DSS/BLF buttons may be employed to transfer calls.

To Transfer an active call:

- Press TRANS/PGM,
- Call the transfer party,
- Unscreened Call Transfer- Hang-up,
- Screened Call Transfer– When call is answered or Splash tone is heard, announce the call then hang-up.

5.2 Call Hold: Placing a call in a waiting state

You may place an active Internal or External call in one of several holding states. In System Hold, other non-restricted stations may pick-up the call. In Exclusive Hold, only the holding station may pick-up the call.

The system is assigned a preferred hold type (System or Exclusive). You may override this **Hold Preference** by pressing the HOLD/SAVE button twice.

The LEDs for CO/IP line buttons flash at distinctive rates for the holding station and other iPECS Phone users.

There are also user operations such as pressing a DSS/BLF button that will place a call in **Automatic Hold**.

Calls will remain in the held state for a period and then recall the user. This **Hold Recall** is provided with a different ring signal. If not answered in a timely manner, the Attendant will receive **Attendant Hold Recall**.

To place a call on Hold:

- Press HOLD/SAVE.

5.3 Broker Call: Switching between two calls

You may switch between the active call and a call on *Hold*, placing the active call on Hold acting as a broker between two or more parties (**Broker Call)**. iPECS Phone users may 'broker' for multiple calls up to the number of **CO/IP line** buttons.

To switch between two calls (Broker Call):

- Press the desired **CO / IP line** button.

5.4 Joining Multiple People in a Conference

You can establish a **Conference** with up to 3 parties(iPECS-LIK)/13 parties(iPECS-MG), or 32 parties when using a Multi-Party Conference Interface Module (MCIM)(iPECS-LIK). The other parties in the **Conference** may be internal or external.

A **Conference** can be placed on Hold and is subject to *Hold Recall*.

You may also use the Conference operation to join 2 external parties in a private conversation. This is an **Unsupervised Conference**, which is not subject to the normal **Hold Recall** operation.

To establish a Conference:

- Establish call with one of the desired conference parties,
- Select the Conf Soft button,
- Establish call with the other conference party,
- Select the Conf Soft button,
- Select the Conf Soft button again to establish the conference.

To place a Conference on Hold:

- Press the HOLD/SAVE button.

To retrieve the Conference from Hold:

- Select the Conf Soft button.

To establish an Unsupervised Conference:

- Establish conference with two external parties,
- Select the Conf Soft button,
- Hang-up the handset.

To retrieve an Unsupervised Conference:

- Lift the handset,
- Select the Conf Soft button.

5.4.1 Setting up a Conference Room

In addition to establishing a Conference, up to 9 **Conference Rooms** can be set up, letting up to 32 parties converse when using a MCIM. When setting up a Conference Room, a password can be designated for invited parties (internal and external parties) to use for accessing the established Conference Room.

In iPECS-LIK

To set-up a Conference Room:

- Press the TRANS/PGM button,
- Dial 53 to create a Conference Room,
- Dial the desired Conference Room number (1-9),
- If desired enter a password for the Conference Room (up to 12 digits),
- Press HOLD/SAVE to establish the Room.

To join a Conference Room:

- Lift the handset,
- Dial 59 (Conference Room entry code),
- Dial the Conference Room Number,
- Dial the Conference Room password.

To delete a Conference Room:

- Press the TRANS/PGM button,
- Dial 54 (Conference Room delete code),
- Dial the Conference Room number (1-9),
- Dial the Conference Room password,
- Press HOLD/SAVE to delete the Conference Room.

In iPECS-MG

To set-up a Conference Room:

- Press the TRANS/PGM button,
- Dial 54 to create a Conference Room,
- Dial the desired Conference Room number (571-579),
- If desired enter a password for the Conference Room (up to 12 digits),
- Press HOLD/SAVE to establish the Room.

To join a Conference Room:

- Lift the handset,
- Dial 571-579 (Conference Room entry code),
- Dial the Conference Room password.

To delete a Conference Room:

- Press the TRANS/PGM button,
- Dial 55 (Conference Room delete code),
- Dial the Conference Room number (571-579),
- Dial the Conference Room password,
- Press HOLD/SAVE to delete the Conference Room.

5.5 Call Park: Placing a call on Hold to Page

A user may transfer an active CO/IP call to a special holding location (Park Orbit), which can be accessed easily from any station in the system. Typically, this feature is used with *Paging* to notify the desired user of a parked call.

Parked calls are subject to *Hold Recall* after the Call Park timer.

In iPECS-LIK, iPECS SBG-1000

To park an active external call:

- Press TRANS/PGM,
- Dial the Park Orbit (601-610 for iPECS SBG-1000 & 50 & 100, or 601-619 for iPECS-300 & 600 or 601-800 for iPECS-1200),
- Return to idle.

To retrieve a parked call:

- Lift the handset,
- Dial the Park Orbit.

In iPECS-MG

To park an active external call:

- Press TRANS/PGM,
- Dial the Park Orbit (541),
- Dial the Park number (00-49)
- Return to idle.

To retrieve a parked call:

- Lift the handset,
- Dial the Park Orbit (541),
- Dial the Park number (00-49)

5.6 Two-Way Record: Recording a call

You may record an active external conversation in your *Voice Mail Box*.

To activate Two-Way Record while on a CO/IP call:

- Use the Navigation button to display the next Menu and select the Record Soft button, record warning tone is heard and recording starts.

To stop Two-Way Record while on a CO/IP call:

- Use the Navigation button to display the next menu, and select the Record Soft button or,
- Hang-up, return to idle.

6. Send & Retrieve Messages

6.1 Responding to a Station Message Waiting Indication

Another station can leave a Station **Message Waiting** indication (MWI) when you do not answer or your phone is in *DND* mode. The message icon will be displayed on the LCD screen. If programmed, a flashing MSG LED on the iPECS Phone also will indicate when there is a Message Waiting. As a further notification, a **Message Wait Reminder Tone** can be provided. You may review and delete messages as well as respond with a call back.

To review your Station messages:

- Press the MSG button, the LCD shows the Message Summary display:

```
1. ICM MWI(002)
2. VSF MSG(002)
3. VMS MSG(001)
4. UMS MSG(003)
5. ICM SMS(00)
BACK          OK
```

- Dial 1 to view Station messages,
- Press the navigation up/down button to scroll through the messages.

To return a call from the list of Intercom (MWI):

- Press the navigation up/down buttons to scroll through the Intercom messages,
- Press the OK Soft button to select and place the return call.

To delete a Station MWI:

- Press the navigation up/down buttons to scroll through the Station messages,
- Press the Delete Soft button to select,
- Dial 1 (Delete MWI).

To delete all Station MWIs:

- Press the Delete Soft button,
- Press 3 (Delete All MWIs).

6.2 Getting Voice Mail Messages

When callers are forwarded or recall to your Voice Mail Box, they can leave a voice message, as part of the integrated **VMIM/VSF/VMIB** module, the **iPECS Feature Server** or an external Voice Mail system.

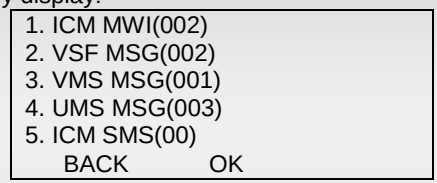
The Voice Mail system allows access to and management of received voice messages. While in your Mail Box, you have control of your password and Mail Box greeting. In addition, you can remotely control Call Forward for your station from the VMIM/VSF/VMIB. You will need to register an *Authorization Code* for your station to access the VMIM/VSF/VMIB Voice messages.

To retrieve Voice Mail locally using a Flex button:

- Press the programmed VOICE MAIL Flex button,
- Dial your Mail Box number and corresponding password to receive the 'Number of Messages' prompt,
- Dial desired option codes,
- At completion of session, hang-up to return to idle.

To retrieve Voice Mail locally using the MSG button:

- Press the flashing MSG button, the LCD shows the Message Summary display:



- Dial 2 for VMIM/VSF, 3 for external VM or 4 for Feature Server Voice Mail, etc.
- After the prompt enter your station number and password,
- Dial desired option codes,
- At completion of session, hang-up to return to idle.
- Press the programmed VOICE MAIL Flex button,
- Dial your Mail Box number and corresponding password to receive the 'Number of Messages' prompt,
- Dial desired option codes,
- At completion of session, hang-up to return to idle.

To access your Voice Mail Box from a Remote Location:

- Lift the handset,
- Dial the telephone number of a *DISA* CO line answered by the VMIM/VSF/VMIB Auto Attendant,
- At answer,
  dial # to receive the 'Mail Box & Password' prompt (iPECS-LIK & SBG),
  dial 523 (VMIB Access Code)(iPECS-MG),,
- Dial the Mail Box and password to receive the 'Number of Messages' prompt,
- Dial '*' (iPECS-MG),
- Dial desired option codes,
- At completion of session, hang-up.

6.3 Sending and Receiving Short Text Messages

You can exchange short text messages (up to 100 alphanumeric characters) with other iPECS display phone users. If there are messages, the message icon will be displayed on the LCD screen in LIP-8024D. If the ring/message LED is set to Message Wait Indication (PGM111-FLEX10), the ring/message LED will flash.

In iPECS-LIK

To send an SMS message to another iPECS display Phone:

- Press the TRANS/PGM button,
- Dial 36 (SMS send code),
- Dial 1 to resend an existing message, or 2 to send a new or edit an existing message,
- Enter the station range to receive the message, to send to a single station enter the station number twice,
- Dial your message using 2 key strokes for each character (refer to Character Entry Chart(iPECS-LIK) in ***Section 4.3.4***).
- Press HOLD/SAVE to send your message.

To view your received Short text messages:

- Press the MSG button, the LCD will display the Message Summary display:

```
1. ICM MWI(002)
2. VSF MSG(002)
3. VMS MSG(001)
4. UMS MSG(003)
5. ICM SMS(003)
 BACK          OK
```

- Dial 5; the first few SMS messages are shown in brief,
- Dial the Message number to view the entire SMS message.

To delete received Short text messages:

- Press the DELETE Soft button,
- Dial 1 to Delete the message, 2 to Cancel, or 3 to Delete all received Short text messages.

In iPECS-MG

To send an SMS message to another iPECS display Phone:

- Press the TRANS/PGM button,
- Dial 43 (SMS send code),
- Dial the station number to receive the message,
- Press the Add Soft button to append the next station number and Dial the station number,
- Press the Finish Soft button,
- Enter your mssage (refer to Character Entry Chart(iPECS-MG) in ***Section 4.3.4***),
- Press HOLD/SAVE to send your message.

To view your received Short text messages:

- Press the Msg Soft button, the LCD will display the Message Summary display,

```
 MWI(00) VMS(00) SMS(01)
ENTER (MWI:1, VMS:2, SMS:3)
```

- Dial 3 to view the SMS message.
- Press the Next Soft button to view the next SMS message.

To delete received Short text messages:

- Press the Delete Soft button.

7. Remote System Access

7.1 Direct Inward System Access (DISA)

DISA (Direct Inward System Access) allows remote users to gain access to the system's resources (remote users may be required to enter an *Authorization Code*). The system will recognize remote user dialed inputs (call other stations, place calls over CO/IP lines, review voice mails, etc). The iPECS SBG-1000 system does not support normal DISA service, but supports call to the station and remote voice mail access when answering by a VSF auto attendant.

In iPECS-LIK, iPECS-MG

To call to the station remotely:

- Call the telephone number of a CO line assigned for answer by a VSF auto attendant,
- Upon answer, dial station number.

In iPECS-LIK, iPECS-MG

To access system resources remotely:

- Call the system's DISA facility,
- Await answer and dial your authorization code (station number and password),
- Dial "*" for end mark (iPECS-MG)
- Dial as needed for the desired system resource.

7.2 Mobile Phone Extension

When away from your desk or office you can place and receive iPECS calls on a registered mobile phone. You may need to activate the Mobile Phone Extension feature and assign the Mobile Phone number.

In iPECS-LIK, iPECS SBG-1000

To register a mobile phone number: (iPECS-LIK)

- Press the TRANS/PGM button,
- Dial 37,
- Dial the mobile phone number,
- Press the HOLD/SAVE button.

To activate a registered mobile phone: (iPECS-LIK)

- Press the TRANS/PGM button,
- Dial 38,
- 1 to activate, 0 to deactivate,
- Press the HOLD/SAVE button.

To place a call from the mobile extension using the iPECS System:

- Dial the ISDN DID number of the station; the system will check the Caller ID and answer the call. The user then will receive intercom dial tone,
- Place internal or external iPECS call as normal.

To Transfer a call from the mobile extension using the iPECS:

- Dial "*" while on an iPECS call,
- Dial the desired extension, the call is transferred and the mobile phone returns to idle.
- Reconnect to the transfer by pressing the # key.

NOTE— This feature is only effective with an ISDN CO line.

In iPECS-MG

To register a mobile phone number:

- Press the TRANS/PGM button,
- Dial 51,
- Select Mobile Index 1 or 2,
- 1 to activate, 0 to deactivate,
- Press the HOLD/SAVE button.

To activate a registered mobile phone from the user's station:

- Press the TRANS/PGM button,
- Dial 52,
- Select Mobile Index 1 or 2,
- Dial the mobile phone number with CO Access code,
- Press the HOLD/SAVE button.

To place a call from the mobile extension using the iPECS System:

- Dial the ISDN DID number of the station; the system will check the Caller ID and answer the call. The user then will receive intercom dial tone,
- Place internal or external iPECS call as normal.

To Transfer a call from the mobile extension using the iPECS:

- Dial the mobile flash digit "*" while on an iPECS call,
- Dial the desired extension, the call is transferred and the mobile phone returns to idle.

NOTE—The mobile extension may reconnect to the transfer call by pressing the mobile flash digit(*).

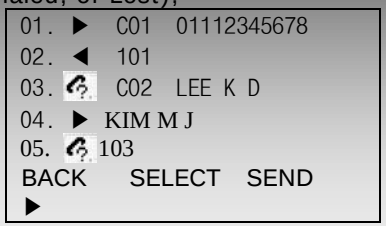
8. Misc. Features

8.1 Call Log

Users can view a log of incoming, outgoing and missed calls on the display (up to 99 records). A LOG Soft button provides simple access to incoming (called), outgoing (dialed) and missed (lost) calls.
NOTE—if a call is missed, the **LOG** Soft button will be displayed as LOG(M); the missed call icon also will appear on the LCD.

To access the Call Log menu:

- Press the LOG Soft button,
- Use the Navigation up/down keys, to view items (Called, Dialed, or Lost),



- Log codes include:
  - ◀ – Incoming call
  - ▶ – Outgoing call
  - – Missed call

To place a call using numbers stored in the Call Log:

- From the Call Log, use the Navigation up/down keys, to view items (Called, Dialed, or Lost),

- Highlight the desired item, and press the Send Soft button to place the call.

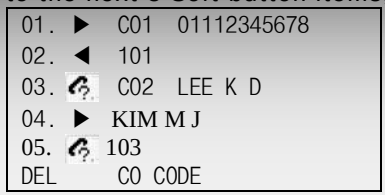
To save an external call to the Station Speed dial:

- Use Navigation up/down buttons to highlight the desired external call item,
- Press the Select Soft button,
- Press the Save Soft button.

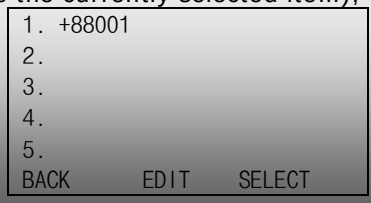
The CO code in a log item is used to seize the co line when placing an external call using the call log. Up to 5 CO codes can be saved.
The first CO code is sent from the system in the saved call log. Normally the first CO code is '9', but if the telephone number is equal to a number in the Speed Dial list, the first CO code will be the access code of the saved CO line of the speed dial. Therefore the first CO code of each call log can be different and is not be editable.
CO Codes 2 - 5 are the user-defined codes. If a code 2 - is selected, the selected code will be used in placing all of the external calls in the call log.

To select a CO Code:

- From the Call Log, use the right Navigation key, to advance to the next 3 Soft button items,



- Press the CO CODE Soft button (code displaying the + symbol is the currently selected item),



To edit the CO code (positions 2-5 only):

- Use Navigation up/down buttons to highlight the desired item,
- Press the Edit Soft button to modify selection.

To select the CO code:

- Use Navigation up/down buttons to highlight the desired item,
- Press the Select Soft button.

8.2 Contrast (iPECS-LIK)

LCD contrast can be adjusted to enhance viewing ability.

To change the LCD Contrast:

- While in an idle state, press the VOL ▲ VOL ▼ buttons to adjust the brightness.
  ▲- increase (darker)
  ▼- decrease (brighter)

8.3 Background Music and Music on Hold (iPECS-LIK)

Two audio sources can be connected to the system. These sources or an internal source provide input for Background Music (BGM) and Music On Hold (MOH). In addition, a recorded message from the VMIM can be used. BGM is played over the speakers of the iPECS Phone when the station is idle. MOH is played to callers placed on *Hold*.

There are eleven possible selections for BGM and MOH:

00: Off
01: Source BGM1
02: Source BGM2
03: VSF MOH 1
04: SLT MOH 1
05: SLT MOH 2
06: SLT MOH 3
07: SLT MOH 4
08: SLT MOH 5
09: VSF MOH 2
10: VSF MOH 3

To turn on Background Music:

- Press HOLD/SAVE to cycle through the BGM selections.

8.4 Using Internal, External and Meet-Me Paging

The User can broadcast announcements to other stations and/or external speakers. Stations are assigned to one or more of the **Internal Page Zones**. The system has two **External Page Zones** that can be connected to external speakers.

In iPECS-LIK, Page Zone codes are:

Internal Page Zones 501-510 (iPECS SBG-1000 & 50 & 100), 501-535 (iPECS-300 & 600), 301-400 (iPECS-1200)

Internal All Call Page 543

External Page Zones 545-546

External All Call Page 548

All Call Page 549

In iPECS-MG, Page Zone codes are:

Internal Page Zones :

543 + Zone No(01~15) (iPECS-MG100)

543 + Zone No(01~30) (iPECS-MG300)

Internal All Call Page 543 + 00

External Page Zones 548

All Call Page 549

If the desired Page Zone is busy, the User can elect to be recalled when their turn comes in the queue. Users can also request a paged party answer the Page using **Meet-Me Paging**. In this case, the paged party may answer the page from any phone in the system by dialing the Meet-Me code.

To make a page:

- Lift the handset,
- Dial the desired Page zone,
- If assigned, after page warning tone, make announcement.

To queue for a page when busy is received(iPECS-LIK & SBG):

- Press the MSG button,
- Replace the handset returning to idle.

To answer a Meet-me-Page:

- Lift the handset.
- Dial **544**(iPECS-LIK)/511(iPECS SBG-1000)/546(iPECS-MG) (Meet-Me-Page code)**.**

8.5 Push-To-Talk (PTT) Page

iPECS Phones can be assigned as a member of one or more of the system's nine Push-To-Talk (PTT) page groups. Users separately log-in or log-out of any one or all PTT groups to which the phone is assigned. Once logged in, place or receive one-way page announcements to/from other users who are logged in to the same PTT group.

To log-in to a PTT group:

- Dial #0(iPECS-LIK)/538(iPECS-MG),
- Dial the desired PTT group number (1-9 or 0 for all groups),

To log-out of the PTT group(s):

- Dial #0(iPECS-LIK)/538(iPECS-MG), the PTT Log-in/out code,
- Press the * key.

To place a page announcement to the active PTT group:

- Press and hold the PTT Flex button,
- After confirmation tone, make page announcement.

8.6 Wake-Up Alarm

iPECS supports an Alarm clock for each station in the system. The alarm clock can be set to repeat daily or as a one-time alarm.
When responding to the alarm by lifting the handset, BGM will be provided.

To set the Wake Up Alarm clock:

- Press TRANS/PGM,
- Dial **41**(iPECS-LIK))**/21**(iPECS SBG-1000)**/13**(iPECS-MG) (Alarm Clock code),
- Dial 2-digit hour and minute (hh/mm) for alerting,
- For a daily (repeating alarm), press #,
- Press HOLD/SAVE.

To erase Wake-Up:

- Press TRANS/PGM,
- Dial **42**(iPECS-LIK)**/22**(iPECS SBG-1000)**/14**(iPECS-MG) (Alarm Clock delete code),
- Press HOLD/SAVE.

8.7 Alarm/Door Bell

The system can monitor external **Alarm** or **Door Bell** contacts:
Alarm Monitor—should the external contact activate, a unique Alarm Ring signal and LCD display may be received. To restart the monitor circuit, the external contacts must be deactivated and the Alarm Ring signal terminated.
Door Bell—a unique Door Bell Ring (single tone burst) may be received each time the external contact is activated. A system contact also can be assigned to act as a **Door Open** contact.

To terminate the Alarm signal:

- Dial 565(iPECS-LIK & MG)/65(iPECS SBG-1000) (Alarm Stop code).

To activate the Door Open contacts:

- Lift the handset,
- Dial Door Open code, #* and contact number 1-4.

NOTE—Contacts 3 & 4 are only available in the iPECS -300 & 600. Contacts 1 is available in the iPECS -MG.

8.8 Power Fail Transfer (PFT)

When AC power to the system fails, back-up operation may be provided with back-up batteries or **Power Fail Transfer (PFT)**. When battery back-up is provided the station will operate normally. When **PFT** is implemented, an SLT is connected to a CO line by the system. This SLT can be used as any normal SLT, providing service while power is out.

8.9 System Voice Memo

The integrated Voice Mail modules incorporate several **Voice Memos** to provide Station Users with general information such as station number, date, time, and feature status. Voice Memos are heard over the iPECS Phone speaker and over the handset for SLTs.

For the **Station Status Memo**, the following items are reported:

ICM Signaling Mode (Handsfree/Tone/Privacy)

Station IP Address

Station Mac Address

Number of messages x (x: number of all message waiting)

Wake-Up Time (hh:mm)

Do Not Disturb

Forwarded to station xxx

Forwarded to speed bin xxx

Queued CO/IP line xxx

Locked (Temporary COS)

COS x

To hear Date & Time memo:

- Dial the Voice Memo code (661 for iPECS-50 & 100, or *661 for iPECS-300 & 600, or 675+1 for iPECS-MG),
- Date and Time memo is heard, “Date is May 2nd.Time is xx:xx pm”.

To hear Station Number Prompt:

- Dial Voice Memo code (662 for iPECS-50 & 100, or *662 for iPECS-300 & 600, or 675+2 for iPECS-MG),
- The Station Number memo is heard, “This is station 150”.

To hear Station Settings:

- Dial Voice Memo code (663 for iPECS-50 & 100, or *663 for iPECS-300 & 600, or 675+3 for iPECS-MG),
- Station Status Memo is heard.

NOTE—only activated features are announced.

8.10 Hot Desk

iPECS phones in the system may be assigned for **Hot Desk** operation. These Hot Desk phones let you log-on and use the Hot Desk phone as if it were your station.

Once logged-on, the Hot Desk station will take on the attributes assigned to your station number and you can make calls as normal. When logged-out, calls to your station number are forwarded to the chosen destination.

In iPECS-LIK

To Log on to a Hot Desk station:

- Press the TRANS/PGM button,
- Dial *0,
- Dial your Authorization Code (Station Number and Password).

To Log out of the Hot Desk station:

- Press the TRANS/PGM button,
- Dial * twice,
- Use the VOL ▲▼ buttons to select a call forward destination for your calls, speed dial, joined mobile phone, VMIM/VSF, or VM group,
- Press the HOLD/SAVE button.

In iPECS-MG

To Log on to a Hot Desk station:

- Lift the handset,
- Dial 525
- Dial your Authorization Code (Station Number and Password).

To Log out of the Hot Desk station:

- Press the TRANS/PGM button,
- Dial 525,
- Input Call forward destination number optionally
- Press the HOLD/SAVE button.

9. PBX, Centrex & ISDN

9.1 Access PBX or Centrex features

The iPECS has been designed to operate with a host PBX system or Centrex services from your service provider. The iPECS connects to a host with analog CO lines.

When accessing a CO line, the phone will act as an extension of the host, allowing access to the host system features using the host dial codes. While on a call, use the iPECS **Flash** feature to transfer calls to other host extensions or access features of the host.

The Flash feature may be used on other CO lines to regain dial tone from the CO line without relinquishing control of the CO line to place another call.

To access PBX or Centrex features while idle:

- Lift the handset,
- Select/dial access a PBX/Centrex CO line,
- Dial PBX/Centrex feature code.

To access PBX/Centrex features while on a PBX/Centrex CO line:

- Use the Navigation button to display the next menu, and select the Flash soft button,
- After receiving new dial tone, dial the PBX/Centrex feature code.

9.2 Access the ISDN Network

9.2.1 Using the Keypad facility to access ISDN features

Access to certain features of your ISDN services requires that dialed digits be sent to the ISDN as data and not tones. In this case, dialed digits are sent as 'Keypad messages'.

A Keypad Facility button must be assigned using the *Flex Button program* procedures. Once active, dial into the ISDN for services; however, actions other than dialing will deactivate the Keypad Facility operation.

To activate Keypad Facility operation:

- Press the programmed KEYPAD FACILITY button to switch to keypad mode,
- Dial as desired.

To deactivate Keypad Facility operation:

- Press KEYPAD FACILITY,
  OR
- Press a Feature or Flex button.

9.2.2 Using ISDN Supplementary Services

ISDN service providers may incorporate features similar to those of Centrex. These ISDN Supplementary services are provided on a subscription basis, and as with Centrex, are accessed using the *Flash* button on an iPECS phone.

Using supplementary services an ISDN line can be placed on Hold and a second call placed on the line. You may then alternate between the two held calls (Broker Call) using the hold button. An ISDN line conference can be established using the Flash and Conf Soft buttons. A conference can also be placed on hold.

While on an ISDN CO line, to access ISDN Supplementary services:

- Press Flash,
- Press HOLD/SAVE, Conf, or **CO line** button to activate the desired feature.

9.2.3 Activating ISDN Caller ID Restriction

iPECS Phone users can restrict the transmission of Caller ID to the far-end. This may be a subscription service of your carrier. Separate Flex buttons are required to activate outgoing, Connected Line (COL), and incoming, Calling Line ID (CLID) restriction.

To restrict Caller ID:

- Lift the handset,
- Press programmed CLIR/COLR button to place call.

10. Features & Flex Buttons

10.1 Entering Station Program Data

A special code set is available for iPECS Phone users to assign certain attributes such as Authorization Codes (Passwords). After entering the **User Program** mode, dial the codes to select the attribute and setting. Once selected, the setting is saved. A list of the User Program codes, the feature/function and any input required are given in *Appendix B*. In some cases, you enter these codes as part of Flex button assignments.

To assign user programmable attributes to your station:

- Press TRANS/PGM,
- Dial desired User Program codes shown in *Appendix B*,
- Press HOLD/SAVE.

10.2 Assigning Features to Flex Buttons

You may assign features and functions to the Flex buttons on your iPECS Phone (possibly CO/IP lines).

Flex buttons may be assigned for most features providing **One-Touch** feature activation (ex., a Flex button may be assigned to access the *Account Code* feature and may include the Account code digits).

Features that may be assigned to a Flex button include:

DSS/BLF—Enter station number.

Speed Dial—Enter Station/System Speed dial bin.

Flex Numbering Plan—Enter Flex Numbering Plan code (refer to *Appendix A*).

User Program Code—Press TRANS/PGM and enter a User Program code (refer to *Appendix B*).

CO/IP Line—Enter the CO/IP line or group number.

To assign a feature to a Flex button:

- Press TRANS/PGM,
- Press the desired Flex button,
- Dial desired code and required inputs; for User Program codes (***Appendix B***), first press the TRANS/PGM,
- Press HOLD/SAVE.

APPENDIX A FLEXIBLE NUMBERING PLAN

In iPECS-LIK, iPECS SBG-1000

Feature	iPECS -50	iPECS -100	iPECS -300	iPECS -600	iPECS -1200	iPECS SBG-1000
Intercom Call	100 - 149	100 - 169	100 - 399	1000 - 1599	1000 - 2199	10-33
CO/IP Group Access	801 – 820	801 - 820	801 - 872	801 - 872	89001 - 89200	801 - 805
Individual CO/IP Line Access	8801 – 8842	8801 – 8842	88001 – 88200	88001 – 88400	88001 – 88600	8801 – 8810
Group Pilot Number	620 – 659	620 - 659	620 - 667	620 - 667	401 - 500	620 – 631
Internal Page Zone	501 - 510	501 - 510	501 - 535	501 - 535	301 - 400	501-510
Call Parking Locations	601 – 610	601-610	601 - 619	601 - 619	601 - 800	601 – 610
Station User VMIM/VSF Features	66	66	*66	*66	*66	
Door Open	#*1	#*1 - #*2	#*1 - #*4	#*1 - #*4	#*1 - #*4	#*

Feature	iPECS-LIK	iPECS SBG-1000	Remark
Internal All Call Page	543		
Meet Me Page	544	511	
External Page Zone 1-2	545 - 546		
External All Call Page	548		
All Call Page (Internal/External)	549	500	
SMDR Account Code Enter	550		SLT use only
Flash Command to CO Line	551		SLT use only
Last Number Redial	552	52	SLT use only
DND	553	53	SLT use only; Toggle ON/OFF
Call Forward	554	54	
Speed Dial Programming	555	55	SLT use only
Message Wait/Callback Enable	556	56	SLT use only
Message Wait/Callback Return	557	57	SLT use only
Speed Dial Access	558	58	SLT use only
Cancel DND/FWD	559	59	SLT use only

Feature	iPECS-LIK	iPECS SBG-1000	Remark
CO System Hold	560	67	SLT use only
Program Mode Access	561		SLT use only
Attendant Unavailable	562		
Alarm Reset	565	65	
Group Call Pickup	566	**	
Universal Answer	567		
Account Code with bin	568		
Walking COS Code	569		
ACD Supervisor On/Off Duty	571		
ACD Supervisor Login	572		
ACD Supervisor Logout	573		
ACD Help Code	574		
ACD Calls In Queue Display	575		
ACD Supervisor Status Display	576		
ACD Supervisor Monitor	577		
ACD Reroute Queued Call w/answer	578		
ACD Reroute Queued Call w/o answer	579		
Enter Conference Room	59		
Camp-On Answer	600	66	SLT use only
Call Coverage button	67	*#	
Direct Call Pickup	7	7	
Retrieve Last Held CO/IP	8*	8*	
Retrieve Individual Held CO/IP	8#	8#	
Access CO Line in the 1st Available CO Group	9	9	
Attendant Call	0	0	
VM Message Wait Enabled	*8		
VM Message Wait Disable	*9		
MCID Request	*0		
Unsupervised Conference extend code	##		
PTT Group Login/Logout	#0		

In iPECS-MG

1) Basic Number

No	Name	Code	Remark
1	Station Number	100 ~ 4xx	
2	CO Group Access Code	9, 801 ~ 872(MG-300) 801 ~ 824(MG-100)	
3	Station Group Number	620 ~ 669(MG-300) 620 ~ 639(MG-100)	

2) Feature Code

No	Feature Name	Code	Remark
1	Attendant Call	0	
2	Conference Room 1	571	
3	Conference Room 2	572	
4	Conference Room 3	573	
5	Conference Room 4	574	
6	Conference Room 5	575	
7	Conference Room 6	576	
8	Conference Room 7	577	
9	Conference Room 8	578	
10	Conference Room 9	579	
11	Internal Page	543	543 + 00, xx 00: All Call Page Xx: Page Group #
12	Personal VM Page	544	
13	Announcement Page For Attendant	545	
14	Page Auto Answer	546	
15	Internal Page Answer (Meet-Me Page)	547	
16	External Page	548	
17	Internal-External Page All	549	
18	Call Forward Register	554	554 + Type +

No	Feature Name	Code	Remark
			Destination
19	Pilot Hunt Call Forward Register	514	514 + Type + Destination
20	Pilot Hunt Call Forward Cancel	515	
21	DND Status Change	516	
22	DND Delete	517	
23	Account Code	550	
24	CO Flash	551	
25	Last Number Redial	552	
26	Station Speed PGM	553	
27	Speed Dial	555	
28	MWI Register	557	
29	MWI Answer	558	
30	MWI Cancel	559	
31	Call Back Register	518	
32	Call Back Cancel	519	
33	Group Call Pickup	564	
34	Direct Call Pickup	7	
35	Walking COS	520	
36	Call Parking Location	541	541 + xx Xx: Parking Location (00 ~ 49)
37	PGM Mode Access	521	
38	Two-Way Record	522	
39	VMIB Access	523	
40	AME Access	524	
41	CO Line Access	88	88 + xxx Xxx: CO Line # (001 ~ 200 : MG-300 01 ~ 80 : MG-

No	Feature Name	Code	Remark
			100)
42	VM MWI Enable	*8	
43	VM MWI Cancel	*9	
44	MCID Request	*0	
45	Unsupervised Conf Extend	5##	
46	PTT Group Access	524	524 + (0~9,*) 0 ~ 9: PTT Group # *: Log out
47	Hot Desk Log In/Log out	525	
48	Name Register	526	
49	Create Conf Room	527	527 + Conf. Room #
50	Delete Conf Room	528	528 + Conf. Room #
51	Wake Up Register	529	529 + HH:MM
52	Wake Up Cancel	530	
53	Temporarily COS Down	531	
54	Cancel Temp COS Down	532	
55	Password Change	533	
56	Inter-Phone Group Access	534	
57	Call Wait Request	535	
58	Preselected MSG PGM	536	
59	Forced Handsfree Call	537	
60	Call Based CLIR	582	
61	CLIR Access	583	
62	COLR Access	584	
63	Pilot Hunt Call	585	
64	Command Call Oneway	581	
65	Command Call Conf	580	
66	Intrude Register	589	

No	Feature Name	Code	Remark
67	Camp On Register	590	
68	OHVO Register	591	
69	Mobile Num Register	592	
70	Mobile CLI Register	593	
71	Mobile Access	594	
72	CCR Access	670	
73	CCR Access And Drop	671	
74	System Hold	560	
75	Return Held CO	8**	
76	Sys Memo	675	
77	DISA Tone Service	678	
78	All Feature Cancel	679	
79	Add Conf Member	680	
80	System Alarm Reset	565	
81	Fault Alarm Reset	566	
82	Door Open	#*1	
83	Keypad Facility	##*	
84	T-Net Log-In/Out	586	
85	Universal Answer	587	
86	USB Call Record	588	
87	Delete All VM Message	681	
88	VM Page Message Record	682	
89	Direct VM Transfer	683	
90	Loop Key	684	
91	Call Log	685	

APPENDIX B USER PROGRAM CODES

In iPECS-LIK

CODE	FUNCTION	REMARK
10	Enblock Mode Dialing	iPECS LIP-7000 only
11 x	*Differential Ring, Intercom*	Select Ring Tone 1-8
12 x	*Differential Ring, CO/IP line*	Select Ring Tone 1-8
13 x	*Intercom Answer Mode*	Select ICM Signal mode, 1: HF, 2: TONE, 3: Privacy
14 x	*Call Coverage Attribute Setting*	1+: ON/OFF, 2+: ring delay (0-9)
15 x	*Station Ring Download*	Select download Ring Tone 0-9
19	Ear&Mic Headset Usage	iPECS LIP-7000 only
21	*Knock Down Station COS*	
22	*Restore Station COS*	May require Authorization code
23	*Walking COS*	May require Authorization code
30	VM Mobile Notify	
31	*Station Message Wait Retrieve*	
32	*CLI/IP Message Wait Retrieve*	
33 x	Authorization Code (Password) Entry	Station number +up to 12 digits, no Flex button
34	Assign DID CALL WAIT Button	
35	Message Wait in Executive/Secretary pair	
36	*Send SMS Message*	
37	*Register Mobile Extension*	
38	*Activate Mobile Extension*	
39	Register Mobile Ext. CLI	
41 xx	*Set Wake-Up Time*	Input time, 24 hour clock
42	*Erase Wake-Up Time*	
51 xx	*Custom/Pre-defined Message Display*	Select Message 00-20
52 xx	*Register Custom Message*	Input up to 24 characters
53 x	*Create Conference Room*	Input Conf Room (1-9) & password
54 x	*Delete Conference Room*	Input Conf Room (1-9) & optional password
55	Monitor Conf. Room	
61 x	*Headset/Speakerphone Mode*	
62 x	Headset Ring Mode	1: Speakerphone, 2: Headset, 3: both
71	LCD Display Mode	

CODE	FUNCTION	REMARK
72	Version Display	
73	*Background Music*	
74 x	*Station User Name Registration*	Input up to 12 characters
75	Display Phone IP Address	
76	Change Phone IP Address	
77	Display Phone MAC IP Address	
78	Network Configuration	
79	Display Phone Version	
80	Assign RECORD Button	Requires VSF/External SMDI VM
81	Assign ISDN CLIR Button	
82	ISDN COLR Button	
84	Assign ACCOUNT CODE Button	
85	Assign LOOP Button	
86	Assign ATD INTRUSION Button	
87	ICM Button	
88	Assign CAMP-ON Button	
89	Assign KEYPAD FACILITY Button	
8#	Assign OHVO Button	
91	CONF Button Assignment	
92	CALL BACK Button Assignment	
93	DND Button Assignment	
94	FLASH Button Assignment	
95	MUTE Button Assignment	
96	MONITOR Button Assignment	
97	REDIAL Button Assignment	
98	FWD Button Assignment	
99	*Assign PTT Button*	
*0	*Hot Desk Login Code*	
**	*Hot Desk Log out Code*	
*7	Force Fwd to Dest.	
*8	Register Bluetooth	
*9	Bluetooth Usage	

In iPECS SBG-1000

Code	Function	Remarks
11	Intercom Answer Mode	Select ICM Signal mode, 1: HF, 2: TONE, 3: Privacy
12	Headset/Speakerphone Mode	0:Headset, 1:Speaker
13	Select Headset Ring Type	1: Speakerphone, 2: Headset, 3: both
21	Set Wake-Up Time	Input time, 24 hour clock
22	Erase Wake-Up Time	
31	LCD Display Language	
32	SBG Version Display	
33	Background Music	
34	Station User Name Registration	Input up to 12 characters
35	Display Phone IP Address	May require Authorization code
36	Display Phone MAC IP Address	
37	Display Phone Version	
38	Network Configuration	
41	Forced FWD to Destination	
42	Call Log Display	
43	CLIR Service	
44	COLR Service	
4*	Assign LOOP Button	
50	Assign CALL BACK Button	
51	Assign CONF Button	
52	Assign MUTE Button	
53	Assign ICM Button	
53	Assign REDIAL Button	

In iPECS-MG

Code	**Function**	**Remarks**
11	Intercom Answer Mode	1:H, 2:T, 3:P
12 + Name	User name creation	2 digit for each character
13 + Time	Set wake-up alarm time	HH/mm, 24-hour clock
14	Cancel Wake-up Alarm	
15	Set language for the display	00-14
16	LCD Date Mode Change	DD/MM/YY or MMDDYY
17	LCD Time Mode Change	12 Hour/24 Hour
18	Set Backlight	0-2
21	ICM Ring Type	
22	TRK Ring Type	

Code	Function	Remarks
23	Ring Download	LIP-Series Only
24	Back Ground Music	
31	Temporary COS	Auth. Code required
32	Retrieve COS	Auth. Code required
33	COS Override (Walking COS)	Auth. Code required
34	Register Password	
35	Call Log Protect	
36	SMS Message Protect	LIP-Series/LDP6000-Series
41 + MSG number [xx]	Set Pre-defined Message.	0-9, MSG *: User Custom # Deactivation
42	Create a Station User Message	
43	Send SMS Message	LIP Series/LDP6000 Series
44	Receive SMS Message	LIP Series/LDP6000 Series
51 + x	Activate a mobile phone	X=1-2
52 + x	Register the mobile number	X=1-2
53 + x	Register the mobile CLI number	X=1-2
54 + Rm & Auth Code	Start a Conf Room	
55 + Rm & Auth Code	Close a Conf Room	
61	Speaker/Headset Mode	Speak/Headset/E-MIC
62	Headset Ring Mode	Speaker/Headset/Both
71	Register Station ICLID	
72	View Station ICLID	
81	View IP Address	IP Gigabit Phone/ DTIM/SLTM
82	View Mac Address	IP Gigabit Phone/ DTIM/SLTM
83	View IP Phone version	
80	Network Setting	LIP Series
91	System Version	
92	System IP Address	

Appendix C Useful Information : Open Source Software Notice

Open Source Software Notice

This following GPL (General Public License) software used in this product are subject to the GPL License Agreements.
You can obtain a copy of the GPL licenses from Ericsson-LG Web Site (http://www.ericssonlg.com).

GPL License:

1. **u-boot**
2. **bash**
3. **linux**
4. **busybox**
5. **Alsa Libraries**
6. **udhcpc**
7. **ortp**
8. **Curl / LibCurl**
9. **libsrtp**
10. **Expat xml parser**

Ericsson-LG offers to provide source code to you on CD-ROM for a charge covering the cost of performing such distribution, such as the cost of media, shipping and handling upon e-mail request to Ericsson-LG at. : opensource@ericssonlg.com.
This offer is valid for a period of three (3) years from the date of the distribution of this product by Ericsson-LG.

SLT User Guide for iPECS System

To activate Call Forward to Voice Mail Group,
- Lift handset.
- Dial **5 5 4**.
- Dial Call Forward type number (1~4)
- Dial Voice Mail Group Number.
- Hang up.

To deactivate Call Forward to VMIB,
- Lift handset.
- Dial **5 5 4**.
- Dial # .
- Hang up.

To hear the recorded voice Message,
- Lift handset.
- Dial the Voice Mail Group to receive the "Mailbox & Password" prompt.
- Dial the station number and authorization code to receive the "Number of Messages" prompt.
- Dial '1', for hearing voice message.
- To hear current voice message again, dial 1.
- To save current voice message and hear next message, dial 2.
- To delete current voice message, dial 3.
- To forward current voice message, dial 4.
- To call sender of voice message, dial 5.
- To skip current voice message and hear next message, dial 6.
- To add preamble memo on voice message, dial 7.

Programming Authorization Code
- Lift handset.
- Dial **5 6 1,** the SLT Programming code.
- Dial **3 3**, the Station User Program code.
- Dial Authorization Code (1 to 12 digits) .
- Momentarily press the Hook-switch receive confirmation tone

Programming Your Name
- Lift handset.
- Dial **5 6 1,** the SLT Programming code.
- Dial **7 4**, the SLT Name Program Code.
- Enter name, refer Alphanumeric Chart.
- Momentarily press the Hook-switch receive confirmation tone

Entering an Account Code
To identify a call, system provides the user with an account code field in the Call Logging printout by entering an account code while on an outside call.

After dialing or during a conversation with an external party,
- Press hook switch.
- Dial **550** and account code. (An account code can be up to 12 digits.)
- Press '*'.
- Continue conversation and hang up to finish the call.

Handset Off-hook Alarm
Should the handset be left off the cradle unattended, for any length of time, the user will receive a high pitched signal.
- To cancel the signal, hang up.

Following features are only available with iPECS Hotel S/W.

Baby Listening
This feature allows a guest to monitor his room from any other party of the hotel. You can hear the room which is set baby listening but the room will not be disturbed.
To activate baby listening at guest's room,
- Lift the handset.
- Dial the guest's own room number. (Confirmation tone is heard.)

To cancel baby listening at guest's room,
- Replace the handset.

To operate baby listening from any other phone in the system,
- Lift the handset.
- Dial the guest's own room number.
- DND tone will be heard and dial the guest's own room number again.
- After confirmation tone, baby listening is operated.

Maid Status
The Maid can update the maid status of any room.
To register "Cleaned" at a guest station,
- Dial SLT PGM code.
- Dial 6 4. (Confirmation tone is heard.)

To register "Dirty" at a guest station,
- Dial SLT PGM code.
- Dial 6 5. (Confirmation tone is heard.)